

10/574,788

=> file caplus

FILE 'CAPLUS' ENTERED AT 11:21:02 ON 06 JAN 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 6 Jan 2009 VOL 150 ISS 2

FILE LAST UPDATED: 5 Jan 2009 (20090105/ED)

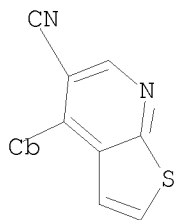
Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/legal/infopolicy.html>

=> d que

L4 STR



Structure attributes must be viewed using STN Express query preparation.

L6 617 SEA FILE=REGISTRY SSS FUL L4

L7 35 SEA FILE=CAPLUS L6

=> d 17 1-35 ibib abs hitstr

L7 ANSWER 1 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:44840 CAPLUS

DOCUMENT NUMBER: 149:556473

TITLE: Study of the cross-recyclization of  
4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans with  
alkylating reagents

AUTHOR(S): Dyachenko, V. D.

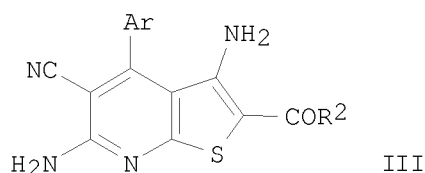
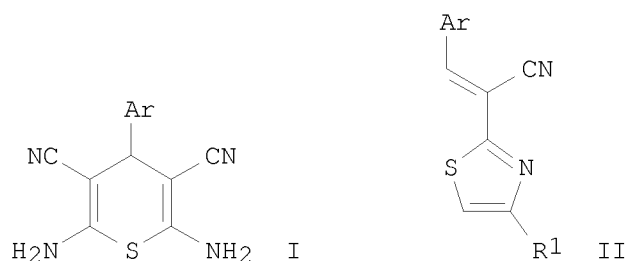
CORPORATE SOURCE: Lugansk. Nats. Pedagog. Univ. im. T. Shevchenko,  
Luhansk, 91011, Ukraine

SOURCE: Zhurnal Organichnoi ta Farmatsevtichnoi Khimii (2007),  
5(4), 14-18

CODEN: ZOFKAM

10/574,788

PUBLISHER: Natsional'nii Farmatsevtichnii Universitet  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
OTHER SOURCE(S): CASREACT 149:556473  
GI

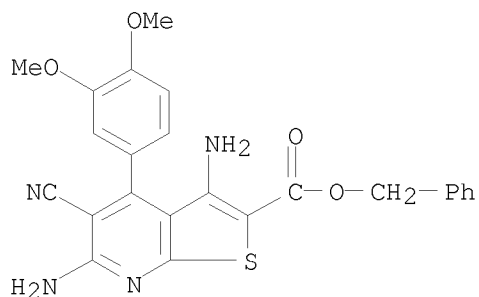


AB The cross-recyclization of 4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans I [Ar = 4-MeOC<sub>6</sub>H<sub>4</sub>, 4-EtOC<sub>6</sub>H<sub>4</sub>, 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, 3-MeO-4-PhCH<sub>2</sub>OC<sub>6</sub>H<sub>3</sub>] with  $\alpha$ -bromoketones R<sup>1</sup>COCH<sub>2</sub>Br (R<sup>1</sup> = cyclopropyl, 4-BrC<sub>6</sub>H<sub>4</sub>, coumarin-3-yl, etc.) or with chloroacetic acid derivs. R<sup>2</sup>COCH<sub>2</sub>Cl (R<sup>2</sup> = NH<sub>2</sub>, PhCH<sub>2</sub>O) afforded the substituted 3-aryl-2-(thiazol-2-yl)acrylonitriles II and thieno[2,3-b]pyridines III, resp.

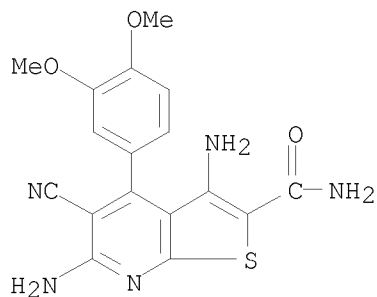
IT 309266-85-1P 361478-09-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of [aryl(cyano)vinyl]thiazoles and diamino(cyano)thieno[2,3-b]pyridines via cross-recyclization of aryl(diamino)dicyano-4H-thiopyrans with  $\alpha$ -bromoketones, chloroacetamide or chloroacetate)

RN 309266-85-1 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)-, phenylmethyl ester (CA  
INDEX NAME)

10/574,788



RN 361478-09-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)- (CA INDEX NAME)



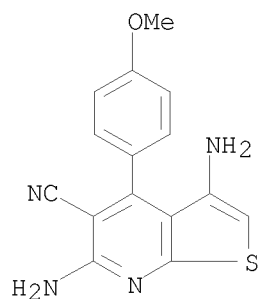
L7 ANSWER 2 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2007:1170553 CAPLUS  
DOCUMENT NUMBER: 148:23751  
TITLE: A novel class of Hsp90 inhibitors isolated by  
structure-based virtual screening  
AUTHOR(S): Park, Hwangseo; Kim, Yun-Jung; Hahn, Ji-Sook  
CORPORATE SOURCE: Department of Bioscience and Biotechnology, Sejong  
University, 98 Kunja-dong, Gwangjin-gu, Seoul,  
143-747, S. Korea  
SOURCE: Bioorganic & Medicinal Chemistry Letters (2007),  
17(22), 6345-6349  
CODEN: BMCLE8; ISSN: 0960-894X  
PUBLISHER: Elsevier Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A novel class of 3-phenyl-2-styryl-3H-quinazolin-4-one Hsp90 inhibitors  
with in vitro anti-tumor activity are identified by structure-based  
virtual screening of a chemical database with docking simulations in the  
N-terminal ATP-binding site, in vitro ATPase assay using yeast Hsp90, and  
cell-based Her2 degradation assay in a consecutive fashion. These results  
exemplify the usefulness of the structure-based virtual screening with  
mol. docking in drug discovery. The structural features responsible for a  
tight binding of the inhibitors in the active site of Hsp90 are discussed  
in detail.  
IT 959123-12-7  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)

10/574,788

(novel class of Hsp90 inhibitors isolated by structure-based virtual screening)

RN 959123-12-7 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-4-(4-methoxyphenyl)-  
(CA INDEX NAME)



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:748488 CAPLUS

DOCUMENT NUMBER: 148:585768

TITLE: Cross-recyclization of  
4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans with  
alkylation reagents

AUTHOR(S): Dyachenko, V. D.; Ryl'skaya, T. A.; Savchuk, S. V.

CORPORATE SOURCE: Kharkov univ., Kharkov, Ukraine

SOURCE: Visnik Kharkivs'kogo Natsional'nogo Universitetu im.  
V. N. Karazina (2006), 731, 86-89

CODEN: VKNUAK

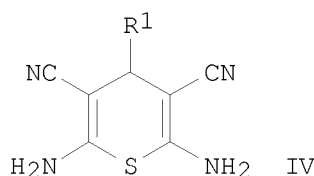
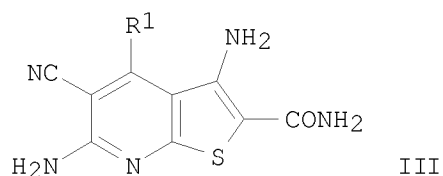
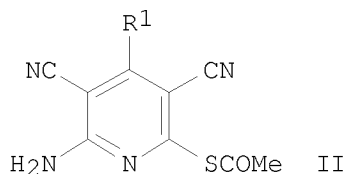
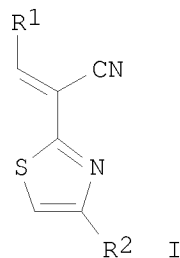
PUBLISHER: Kharkivs'kii Natsional'nii Universitet im. V. N.  
Karazina

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 148:585768

GI

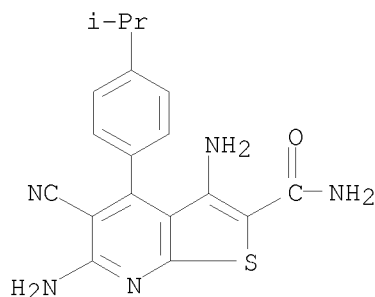


AB Substituted 3-aryl-2-(thiazol-2-yl)acrylonitriles I (R1 = 4-FC6H4, 4-Me2CHC6H4, 1-naphthyl; R2 = cyclopropyl, Ph, 4-ClC6H4, 2-thienyl, 3-coumarinyl, etc.), pyridinedinitrile II (R1 = 3-ClC6H4) and thieno[2,3-b]pyridine III (R1 = 4-Me2CHC6H4) were synthesized via cross-recyclization of thiopyrans IV with  $\alpha$ -bromoketones R2COCH2Br, acetic anhydride or chloroacetamide, resp. The compds. I were also prepared by condensation of the corresponding 2-(cyanomethyl)-4-R2-1,3-thiazoles with aromatic aldehydes R1CHO.

IT 476319-10-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of aryl(thiazolyl)acrylonitriles, pyridinedinitrile and thieno[2,3-b]pyridine via cross-recyclization of aryl(diamino)dicyanothiopyrans with  $\alpha$ -bromoketones, Ac2O or chloroacetamide)

RN 476319-10-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-5-cyano-4-[4-(1-methylethyl)phenyl]- (CA INDEX NAME)



L7 ANSWER 4 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:595589 CAPLUS

DOCUMENT NUMBER: 148:495896

TITLE: A novel synthesis of pyridine-2(1H)-thione, pyrazolo[3,4-b]pyridine, pyrido[2',3':3,4]pyrazolo[1,5-a]pyrimidine, thieno[2,3-b]pyridine, and pyrido[3',2':4,5]thieno[3,2-d]pyrimidine derivatives containing a naphthyl moiety

AUTHOR(S): Abdel Fattah, Azza M.; Elneairy, Mohamed A. A.; Gad-Elkareem, Mohamed A. M.

CORPORATE SOURCE: Chemistry Department, Cairo University, Giza, Egypt

SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (2007), 182(6), 1351-1364  
 CODEN: PSSLEC; ISSN: 1042-6507

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:495896

AB 6-Amino-4-naphthyl-2-thioxo-1,2-dihydropyridine-3,5-dicarbonitriles (I) were synthesized from naphthaldehydes and cyanothioacetamide. I were used as starting materials for the synthesis of the title compds. All structures of the newly synthesized heterocyclic compds. were established on the basis of IR, 1H NMR, 13C NMR, mass spectra, and elemental analyses.

IT 1021299-99-9P 1021300-00-4P 1021300-01-5P

10/574,788

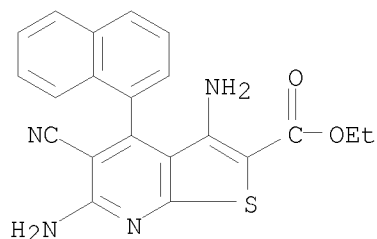
1021300-02-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation of pyridine-2(1H)-thione, pyrazolo[3,4-b]pyridines,  
pyrido[2',3':3,4]pyrazolo[1,5-a]pyrimidines, thieno[2,3-b]pyridines,  
and pyrido[3',2':4,5]thieno[3,2-d]pyrimidines containing a naphthyl moiety)

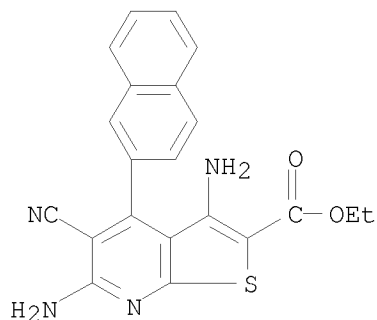
RN 1021299-99-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3,6-diamino-5-cyano-4-(1-naphthalenyl)-, ethyl ester (CA INDEX NAME)



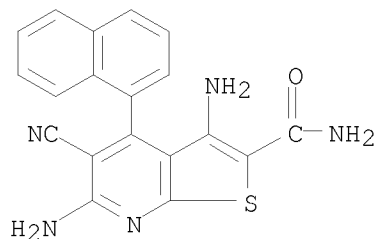
RN 1021300-00-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3,6-diamino-5-cyano-4-(2-naphthalenyl)-, ethyl ester (CA INDEX NAME)



RN 1021300-01-5 CAPLUS

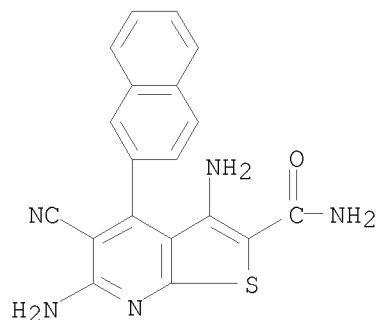
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(1-naphthalenyl)- (CA INDEX NAME)



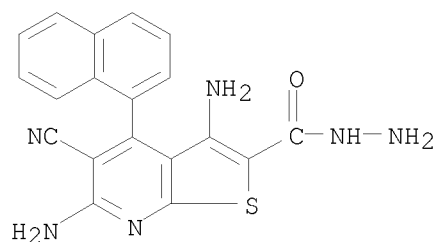
RN 1021300-02-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(2-naphthalenyl)- (CA INDEX NAME)

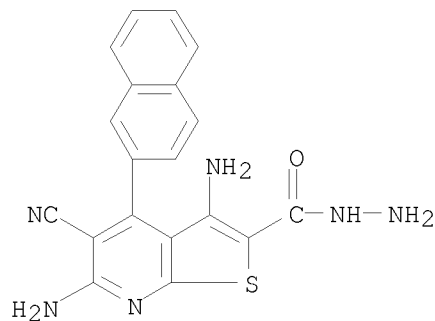
10/574,788



IT 1021300-05-9P 1021300-06-0P 1021300-07-1P  
1021300-08-2P 1021300-09-3P 1021300-10-6P  
1021300-11-7P 1021300-12-8P 1021300-13-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of pyridine-2(1H)-thione, pyrazolo[3,4-b]pyridines,  
pyrido[2',3':3,4]pyrazolo[1,5-a]pyrimidines, thieno[2,3-b]pyridines,  
and pyrido[3',2':4,5]thieno[3,2-d]pyrimidines containing a naphthyl moiety)  
RN 1021300-05-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3,6-diamino-5-cyano-4-(1-naphthalenyl)-, hydrazide (CA INDEX NAME)

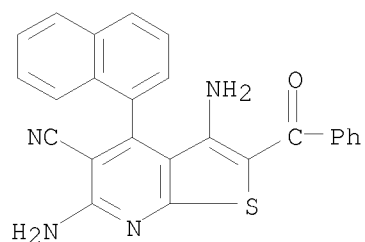


RN 1021300-06-0 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3,6-diamino-5-cyano-4-(2-naphthalenyl)-, hydrazide (CA INDEX NAME)

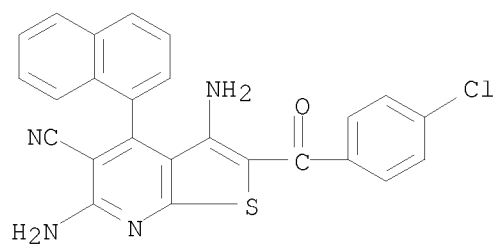


RN 1021300-07-1 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-benzoyl-4-(1-naphthalenyl)- (CA INDEX NAME)

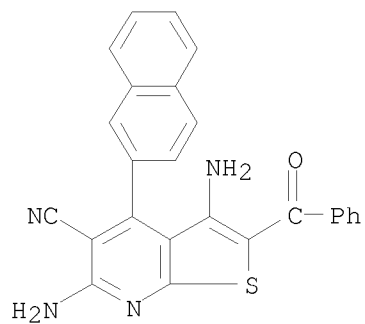
10/574,788



RN 1021300-08-2 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(4-chlorobenzoyl)-4-(1-naphthalenyl)- (CA INDEX NAME)



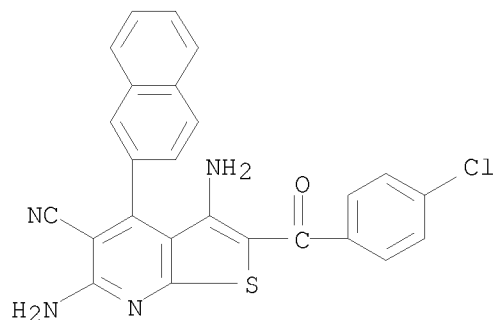
RN 1021300-09-3 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-benzoyl-4-(2-naphthalenyl)- (CA INDEX NAME)



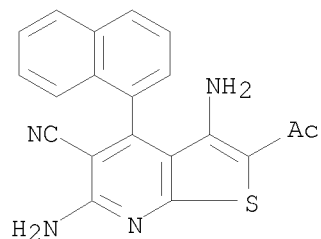
RN 1021300-10-6 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(4-chlorobenzoyl)-4-(2-naphthalenyl)- (CA INDEX NAME)



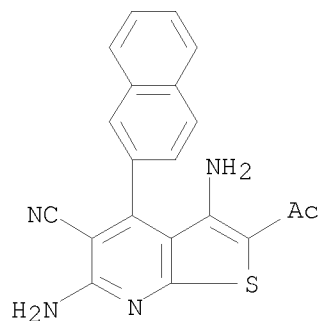
10/574,788



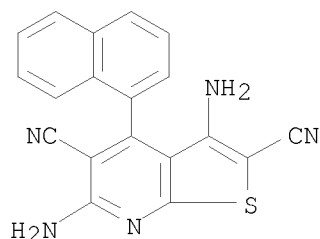
RN 1021300-11-7 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
2-acetyl-3,6-diamino-4-(1-naphthalenyl)- (CA INDEX NAME)



RN 1021300-12-8 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
2-acetyl-3,6-diamino-4-(2-naphthalenyl)- (CA INDEX NAME)



RN 1021300-13-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3,6-diamino-4-(1-naphthalenyl)-  
(CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:541708 CAPLUS

DOCUMENT NUMBER: 148:426837

TITLE: Reactions with 3,6-diaminothieno[2,3-b]pyridines: synthesis and characterization of several new fused pyridine heterocycles

AUTHOR(S): Gad-Elkareem, Mohamed A. M.; Elneairy, Mohamed A. A.; Taha, Adel M.

CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Al-Azhar University (Assiut Branch), Assiut, 71524, Egypt

SOURCE: Heteroatom Chemistry (2007), 18(4), 405-413

CODEN: HETCE8; ISSN: 1042-7163

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:426837

AB 6-Aminopyridine-2(1H)thiones reacting with  $\alpha$ -halo compds. afforded the alkylthiopyridine derivs. which in turn cyclized to thieno[2,3-b]pyridine derivs. (I). Several thieno[2,3-b]pyridine derivs., pyrido[3',2':4,5]thieno[3,2-d]pyrimidine derivs., and pyrido[3',2':4,5]thieno[3,2-c]pyridazine derivs. were prepared starting from I.

IT 299464-98-5P 476319-02-5P 1017623-23-2P

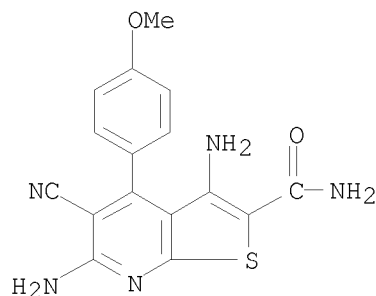
1017623-24-3P 1017623-25-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of new fused pyridine heterocycles via reactions with 3,6-diaminothieno[2,3-b]pyridines)

RN 299464-98-5 CAPLUS

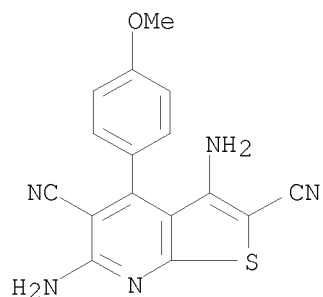
CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(4-methoxyphenyl)- (CA INDEX NAME)



10/574,788

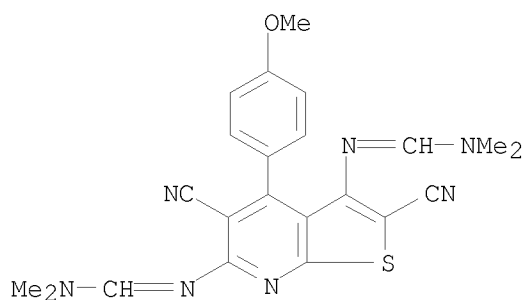
RN 476319-02-5 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3,6-diamino-4-(4-methoxyphenyl)-  
(CA INDEX NAME)



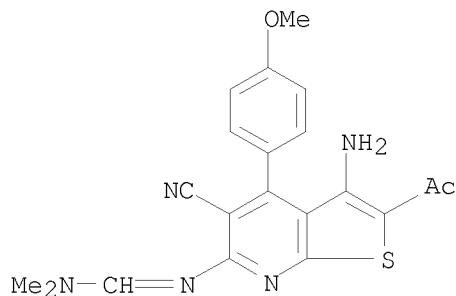
RN 1017623-23-2 CAPLUS

CN Methanimidamide, N'-[2,5-dicyano-3-[[ (dimethylamino)methylene]amino]-4-(4-methoxyphenyl)thieno[2,3-b]pyridin-6-yl]-N,N-dimethyl- (CA INDEX NAME)



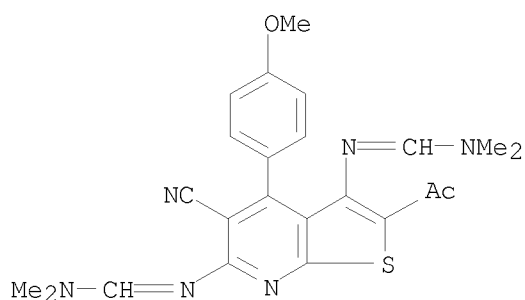
RN 1017623-24-3 CAPLUS

CN Methanimidamide, N'-[2-acetyl-3-amino-5-cyano-4-(4-methoxyphenyl)thieno[2,3-b]pyridin-6-yl]-N,N-dimethyl- (CA INDEX NAME)

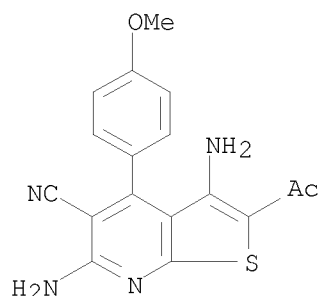


RN 1017623-25-4 CAPLUS

CN Methanimidamide, N'-[2-acetyl-5-cyano-3-[[ (dimethylamino)methylene]amino]-4-(4-methoxyphenyl)thieno[2,3-b]pyridin-6-yl]-N,N-dimethyl- (CA INDEX NAME)



IT 299464-97-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis of new fused pyridine heterocycles via reactions with  
 3,6-diaminothieno[2,3-b]pyridines)  
 RN 299464-97-4 CAPLUS  
 CN Thieno[2,3-b]pyridine-5-carbonitrile,  
 2-acetyl-3,6-diamino-4-(4-methoxyphenyl)- (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:380062 CAPLUS  
 DOCUMENT NUMBER: 148:403161  
 TITLE: Pyridopyrimidines, pyrazolopyrimidines,  
 pyridothienopyrimidines and pyridothienotriazines.  
 Synthesis and biological activity  
 AUTHOR(S): Quintela, Jose Maria; Peinador, Carlos  
 CORPORATE SOURCE: Departamento de Quimica Fundamental, Universidad de A  
 Coruna, A Coruna, E-15071, Spain  
 SOURCE: Trends in Heterocyclic Chemistry (2005), 10, 97-114  
 CODEN: TIHCE6; ISSN: 0972-432X  
 PUBLISHER: Research Trends  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 148:403161

AB The synthesis of pyridopyrimidines, pyrazolopyrimidines,  
 pyridothienopyrimidines, pyridothienotriazines and  
 pyridodithienoditriazines and their evaluation as inhibitors or inducers  
 of the release of histamine is reported. The activity was measured under  
 immunol. and chemical stimulus with polymer 48/80 and the drugs adriamycin  
 and vinorelbine. The expts. were carried out with and without

preincubation of the stimulus with the cells before addition of the drug. Their antitumor activity have been tested in vitro against standard P-388, A-549, HT-29 and MEL-28 tumor cell lines.

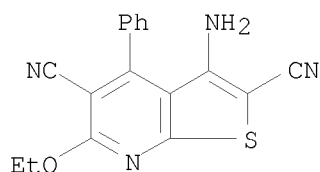
IT 157332-06-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and biol. activity of pyridopyrimidines, pyrazolopyrimidines, pyridothienopyrimidines and pyridothienotriazines)

RN 157332-06-4 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3-amino-6-ethoxy-4-phenyl- (CA INDEX NAME)



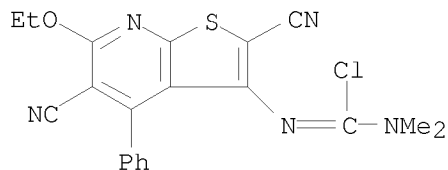
IT 217954-46-6P 1015790-68-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and biol. activity of pyridopyrimidines, pyrazolopyrimidines, pyridothienopyrimidines and pyridothienotriazines)

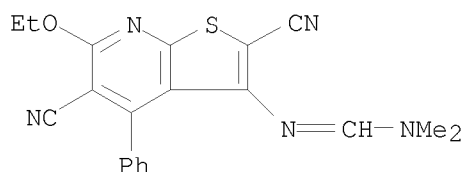
RN 217954-46-6 CAPLUS

CN Carbamimidic chloride, N'-(2,5-dicyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-3-yl)-N,N-dimethyl- (CA INDEX NAME)



RN 1015790-68-7 CAPLUS

CN Methanimidamide, N'-(2,5-dicyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-3-yl)-N,N-dimethyl- (CA INDEX NAME)



REFERENCE COUNT:

78

THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1250604 CAPLUS

DOCUMENT NUMBER: 146:27850

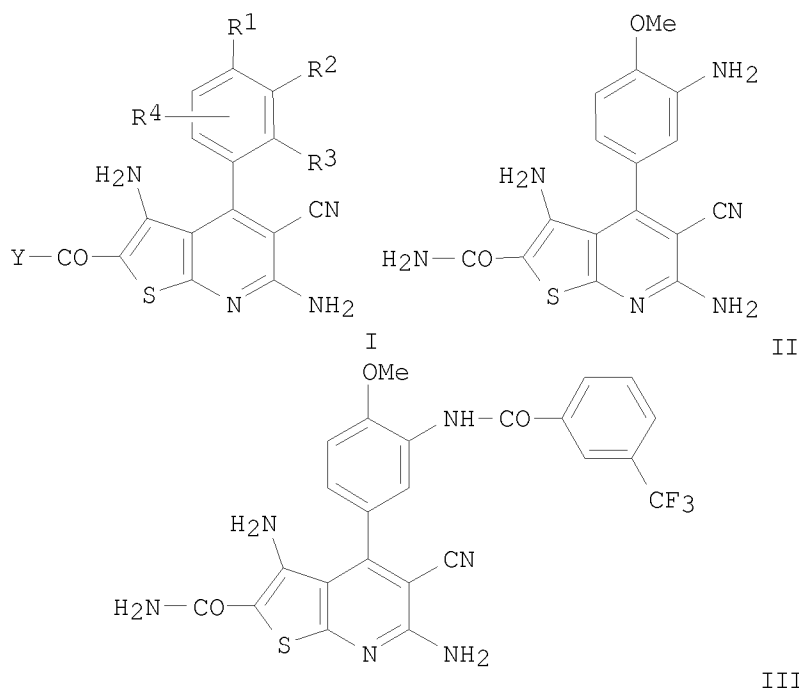
TITLE: Preparation of thieno[2,3-b]pyridines as HSP90 modulators

INVENTOR(S): Eggenweiler, Hans-Michael; Wolf, Michael

10/574,788

PATENT ASSIGNEE(S): Merck Patent GmbH, Germany  
SOURCE: PCT Int. Appl., 97pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006125531	A2	20061130	WO 2006-EP4426	20060511
WO 2006125531	A3	20070412		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
DE 102005024245	A1	20061130	DE 2005-102005024245	20050527
AU 2006251420	A1	20061130	AU 2006-251420	20060511
CA 2609385	A1	20061130	CA 2006-2609385	20060511
EP 1888593	A2	20080220	EP 2006-724792	20060511
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR			
JP 2008542213	T	20081127	JP 2008-512724	20060511
CN 101163707	A	20080416	CN 2006-80013825	20071024
MX 200714720	A	20080215	MX 2007-14720	20071123
IN 2007KN04835	A	20080215	IN 2007-KN4835	20071212
KR 2008021054	A	20080306	KR 2007-730243	20071226
PRIORITY APPLN. INFO.:			DE 2005-102005024245A	20050527
			WO 2006-EP4426	W 20060511
OTHER SOURCE(S):	MARPAT 146:27850			
GI				



- AB Title compds. I [Y = OH, SH, NH<sub>2</sub>, etc.; R<sub>1</sub> = halo, OH, SH, etc.; R<sub>2</sub>, R<sub>3</sub> = NHCO(X)s-Q, CONH(X)s-Q, NHCONH(X)s-Q, etc.; X = (un)substituted alkenyl with provisos; s = 0-1; R<sub>4</sub> = H, halo, CN, etc. ] and their pharmaceutically acceptable salts were prepared For example, N-acylation of amine II with 3-(trifluoromethyl)benzoyl chloride afforded claimed thieno[2,3-b]pyridine III. In HSP90 receptor binding assays, 4-examples of compds. I exhibited IC<sub>50</sub> values ranging from 11-1.9x10<sup>-6</sup> M.
- IT 916164-09-5P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(3-trifluoromethylbenzoylamino)phenyl]thieno[2,3-b]pyridine  
 916164-10-8P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-methoxy-3-acetamidophenyl)thieno[2,3-b]pyridine 916164-11-9P,  
 2-(Aminocarbonyl)-3,6-diamino-5-cyano-4-(4-methoxy-3-(trifluoroacetamido)phenyl)thieno[2,3-b]pyridine 916164-12-0P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4-methoxycarbonylbutyrylamino)phenyl]thieno[2,3-b]pyridine  
 916164-13-1P 916164-14-2P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4-(methoxycarbonyl)benzoylamino)phenyl]thieno[2,3-b]pyridine  
 916164-15-3P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(2-methoxycarbonylmethoxyacetamido)phenyl]thieno[2,3-b]pyridine  
 916164-16-4P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(((3-(trifluoromethyl)phenyl)sulfonyl)amino)phenyl]thieno[2,3-b]pyridine  
 916164-17-5P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4-carboxybutyrylamino)phenyl]thieno[2,3-b]pyridine 916164-18-6P  
 , 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4-carboxybenzoylamino)phenyl]thieno[2,3-b]pyridine 916164-19-7P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(2-carboxymethoxyacetamido)phenyl]thieno[2,3-b]pyridine 916164-20-0P  
 , 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-[(tert-butylloxycarbonyl)amino]acetamido]phenyl]thieno[2,3-b]pyridine  
 916164-21-1P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[[3-[(tert-butylloxycarbonyl)amino]propionyl]amino]phenyl]thieno[2,3-

b]pyridine 916164-22-2P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[4-[(tert-butylloxycarbonyl)amino]butyryl]amino]phenyl]thieno[2,3-b]pyridine  
 916164-23-3P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(indol-7-ylcarbonylamino)phenyl]thieno[2,3-b]pyridine 916164-24-4P,  
 (S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-[(tert-butylloxycarbonyl)amino]-3-(1H-imidazol-4-yl)propionyl]amino]phenyl]thieno[2,3-b]pyridine 916164-25-5P,  
 (S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-[(tert-butylloxycarbonyl)amino]-3-aminocarbonylpropionyl]amino]phenyl]thieno[2,3-b]pyridine 916164-26-6P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-(2-Carbamoylacetyl)amino]phenyl]thieno[2,3-b]pyridine  
 916164-27-7P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(indazol-7-ylcarbonylamino)phenyl]thieno[2,3-b]pyridine  
 916164-28-8P, (S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-[(tert-butylloxycarbonyl)amino]-3-(tert-butylloxy)propionyl]amino]phenyl]thieno[2,3-b]pyridine 916164-29-9P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(3-aminopropionylamino)phenyl]thieno[2,3-b]pyridine 916164-32-4P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4-aminobutyrylamino)phenyl]thieno[2,3-b]pyridine 916164-33-5P,  
 (S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-amino-3-(1H-imidazol-4-yl)propionyl]amino]phenyl]thieno[2,3-b]pyridine  
 916164-34-6P, (S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-amino-3-aminocarbonylpropionyl]amino]phenyl]thieno[2,3-b]pyridine  
 916164-35-7P, (S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(2-amino-3-hydroxypropionylamino)phenyl]thieno[2,3-b]pyridine  
 916164-36-8P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-2-(3-(3-(trifluoromethyl)phenyl)ureido)phenyl]thieno[2,3-b]pyridine  
 916164-37-9P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-methoxy-2-benzoylamino)phenyl]thieno[2,3-b]pyridine 916164-38-0P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-2-(3-carbamoylpropionylamino)phenyl]thieno[2,3-b]pyridine 916164-39-1P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-2-[2-(phenylsulfonyl)acetyl]amino]phenyl]thieno[2,3-b]pyridine  
 916164-40-4P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-2-[(2-(3-ethylureido)ethyl)carbamoyl]phenyl]thieno[2,3-b]pyridine  
 916164-41-5P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(indazol-7-ylcarbonyl)phenyl]thieno[2,3-b]pyridine 916164-42-6P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[5-chloro-3-(3-carbamoylpropylcarbamoyl)phenyl]thieno[2,3-b]pyridine 916164-43-7P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(3-fluorobenzyl)phenyl]thieno[2,3-b]pyridine 916164-44-8P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-chloro-4-methoxy-2-[2-(pyridin-2-yl)ethyl]phenyl]thieno[2,3-b]pyridine 916164-45-9P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(2-carboxyethyl)phenyl]thieno[2,3-b]pyridine 916164-46-0P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl]thieno[2,3-b]pyridine 916164-47-1P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[3-(2-aminoacetyl)amino]phenyl]phenyl]thieno[2,3-b]pyridine 916164-48-2P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-chloro-2-(4-methoxycarbonylbutyrylamino)phenyl]thieno[2,3-b]pyridine  
 916164-49-3P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-chloro-2-(4-carboxybutyrylamino)phenyl]thieno[2,3-b]pyridine  
 916164-50-6P 916164-51-7P,  
 2-((2-(Morpholin-4-yl)ethyl)carbamoyl)-3,6-diamino-5-cyano-4-[2-(4-carboxybutyrylamino)phenyl]thieno[2,3-b]pyridine 916164-52-8P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[2-



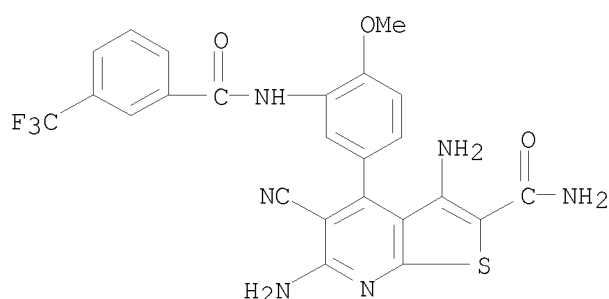
(benzyloxycarbonylamino)phenyl]thieno[2,3-b]pyridine 916164-53-9P  
 , 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4-trifluoromethylbenzoylamino)phenyl]thieno[2,3-b]pyridine  
 916164-54-0P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(2-trifluoromethylbenzoylamino)phenyl]thieno[2,3-b]pyridine  
 916164-55-1P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(pyridin-4-ylcarbonylamino)phenyl]thieno[2,3-b]pyridine  
 916164-56-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thieno[2,3-b]pyridines as HSP90 modulators)

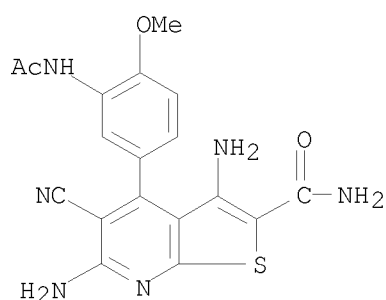
RN 916164-09-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-5-cyano-4-[4-methoxy-3-[[3-(trifluoromethyl)benzoyl]amino]phenyl]- (CA INDEX NAME)



RN 916164-10-8 CAPLUS

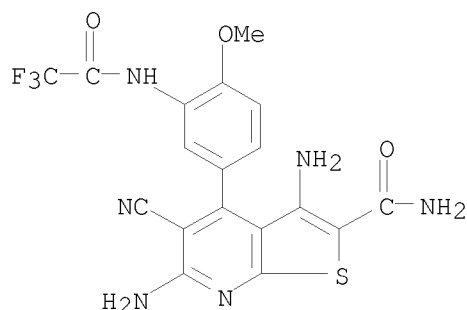
CN Thieno[2,3-b]pyridine-2-carboxamide,  
 4-[3-(acetylamino)-4-methoxyphenyl]-3,6-diamino-5-cyano- (CA INDEX NAME)



RN 916164-11-9 CAPLUS

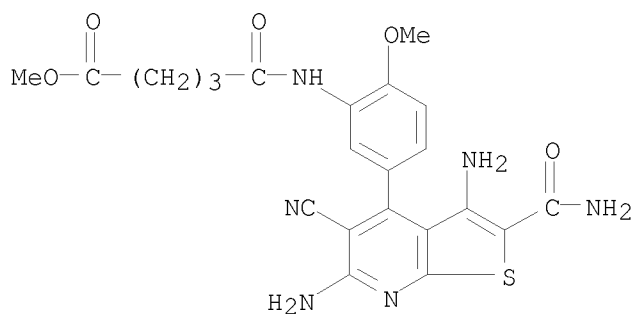
CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-5-cyano-4-[4-methoxy-3-[(2,2,2-trifluoroacetyl)amino]phenyl]- (CA INDEX NAME)

10/574,788



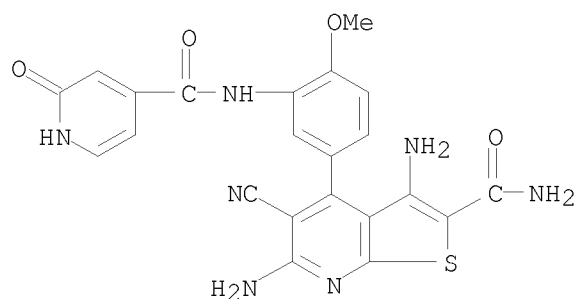
RN 916164-12-0 CAPLUS

CN Pentanoic acid, 5-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-5-oxo-, methyl ester (CA INDEX NAME)



RN 916164-13-1 CAPLUS

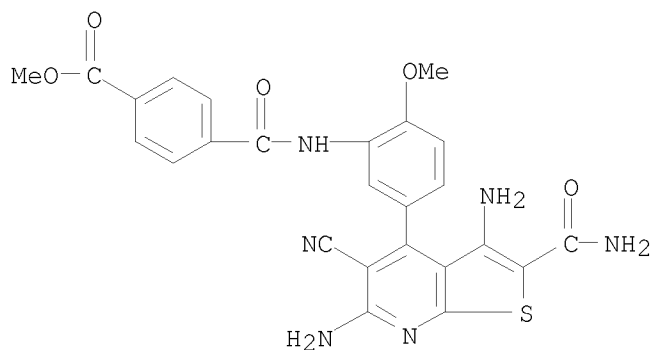
CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[[[(1,2-dihydro-2-oxo-4-pyridinyl)carbonyl]amino]-4-methoxyphenyl]- (CA INDEX NAME)



RN 916164-14-2 CAPLUS

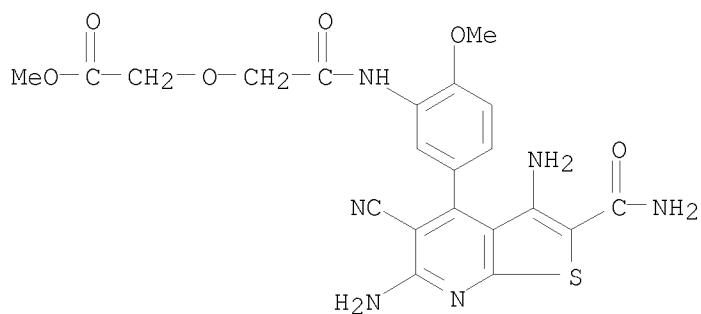
CN Benzoic acid, 4-[[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]carbonyl]-, methyl ester (CA INDEX NAME)

10/574,788



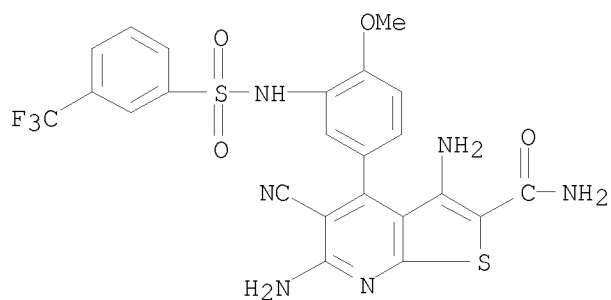
RN 916164-15-3 CAPLUS

CN Acetic acid, 2-[[2-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-2-oxoethoxy]-, methyl ester (CA INDEX NAME)



RN 916164-16-4 CAPLUS

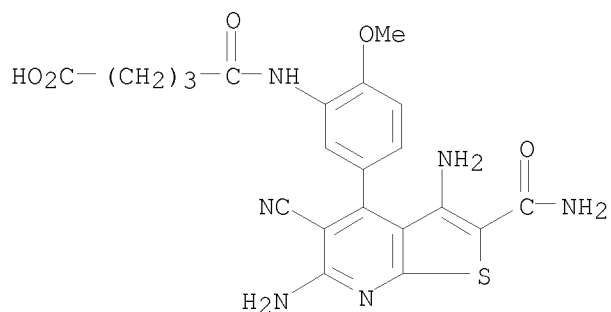
CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[[4-methoxy-3-[[[3-(trifluoromethyl)phenyl]sulfonyl]amino]phenyl]- (CA INDEX NAME)



RN 916164-17-5 CAPLUS

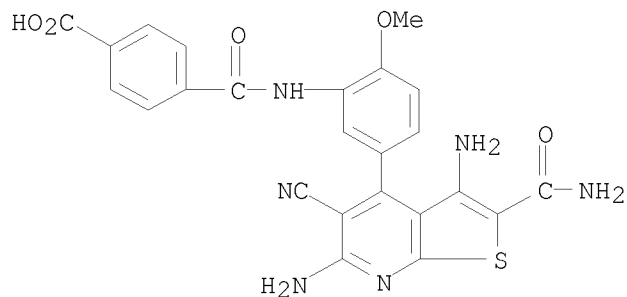
CN Pentanoic acid, 5-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-5-oxo- (CA INDEX NAME)

10/574,788



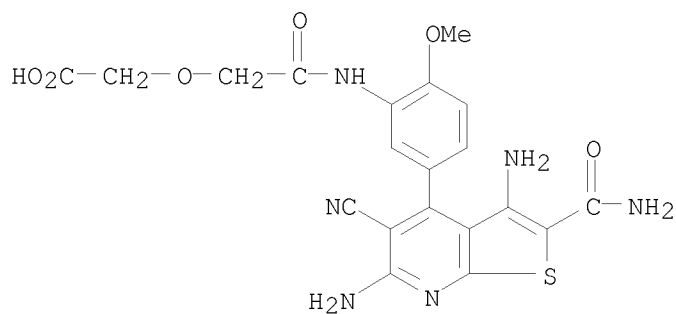
RN 916164-18-6 CAPLUS

CN Benzoic acid, 4-[[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]carbonyl]- (CA INDEX NAME)



RN 916164-19-7 CAPLUS

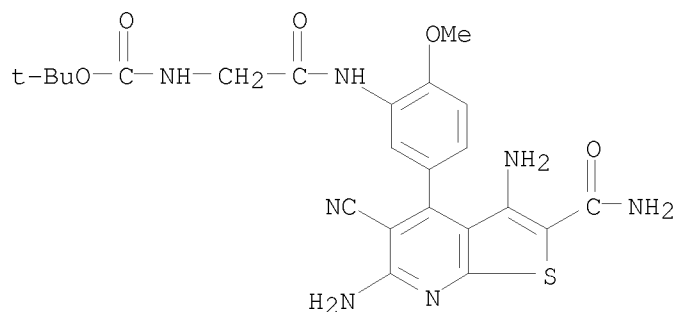
CN Acetic acid, 2-[2-[[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-2-oxoethoxy]- (CA INDEX NAME)



RN 916164-20-0 CAPLUS

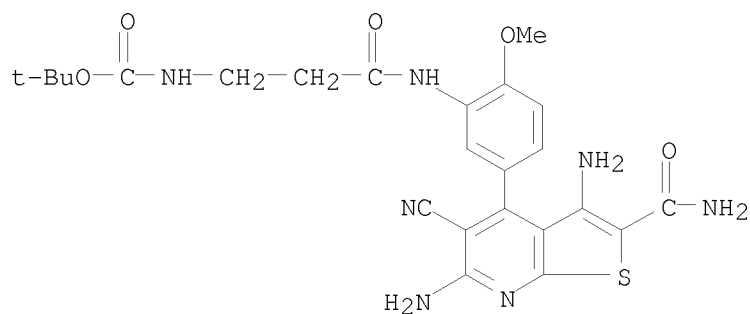
CN Carbamic acid, N-[2-[[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-2-oxoethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

10/574,788



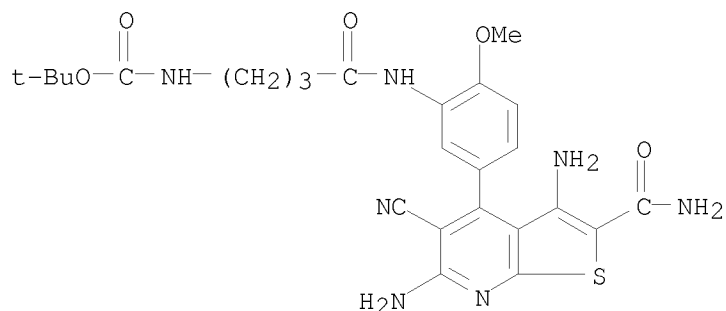
RN 916164-21-1 CAPLUS

CN Carbamic acid, N-[3-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-3-oxopropyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 916164-22-2 CAPLUS

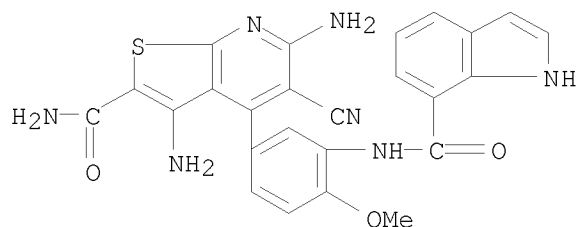
CN Carbamic acid, N-[4-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-4-oxobutyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 916164-23-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[(1H-indol-7-ylcarbonyl)amino]-4-methoxyphenyl]- (CA INDEX NAME)

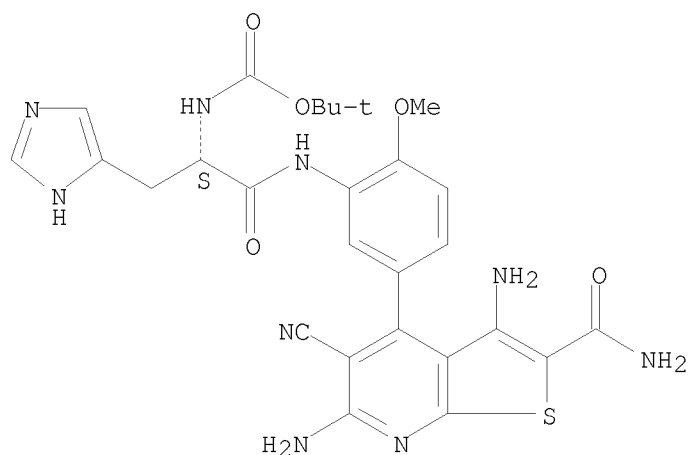
10/574,788



RN 916164-24-4 CAPLUS

CN Carbamic acid, N-[(1S)-2-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-1-(1H-imidazol-5-ylmethyl)-2-oxoethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

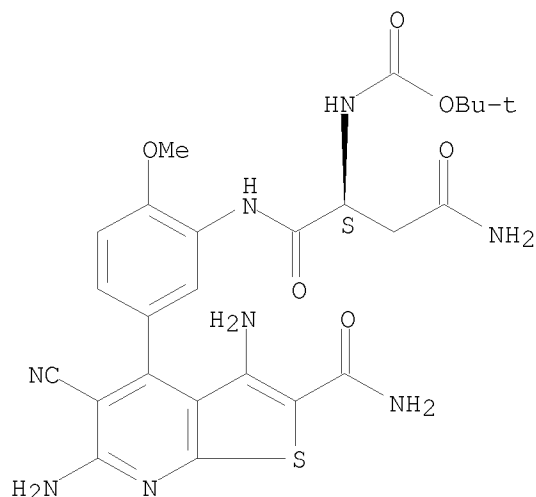


RN 916164-25-5 CAPLUS

CN Carbamic acid, N-[(1S)-3-amino-1-[[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]carbonyl]-3-oxopropyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

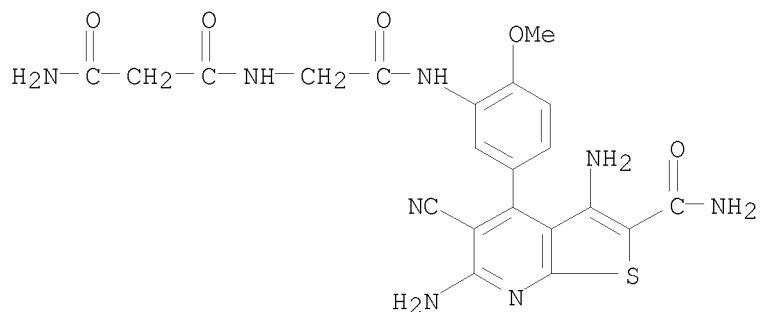
Absolute stereochemistry.

10/574,788



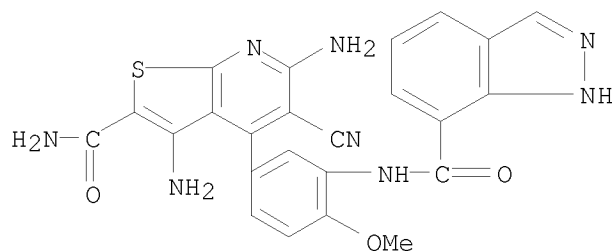
RN 916164-26-6 CAPLUS

CN Propanediamide, N1-[2-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-2-oxoethyl]- (CA INDEX NAME)



RN 916164-27-7 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[(1H-indazol-7-ylcarbonyl)amino]-4-methoxyphenyl]- (CA INDEX NAME)



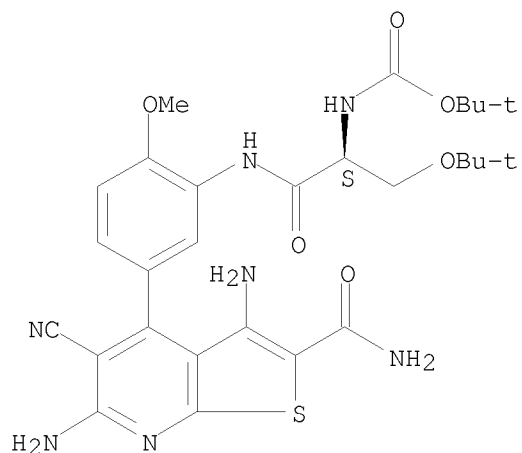
RN 916164-28-8 CAPLUS

CN Carbamic acid, N-[(1S)-2-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-1-[(1,1-dimethylethoxy)methyl]-2-oxoethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

10/574,788

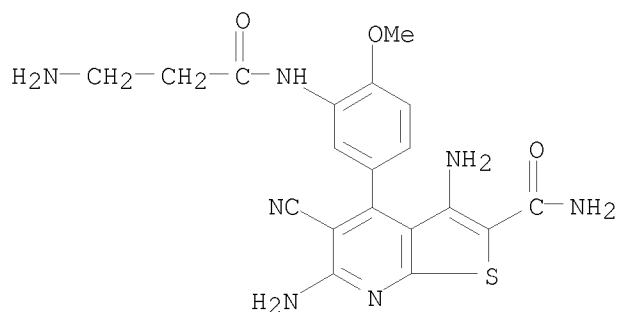
NAME)

Absolute stereochemistry.



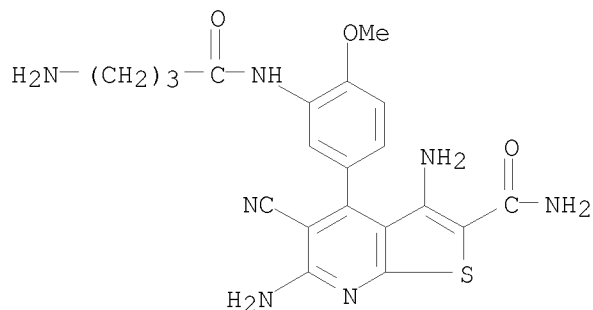
RN 916164-29-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-[3-[(3-amino-1-oxopropyl)amino]-4-methoxyphenyl]-5-cyano-  
(CA INDEX NAME)



RN 916164-32-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-[3-[(4-amino-1-oxobutyl)amino]-4-methoxyphenyl]-5-cyano-  
(CA INDEX NAME)

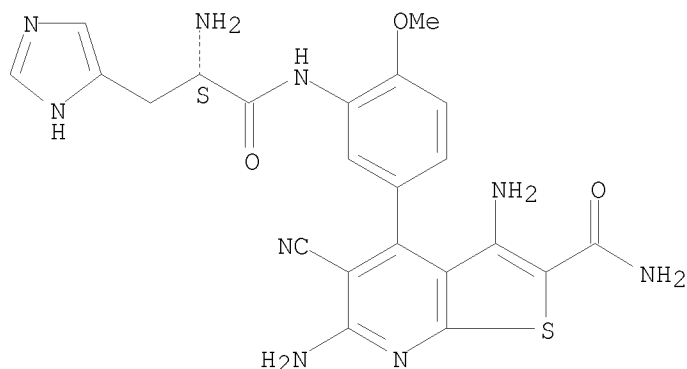




10/574,788

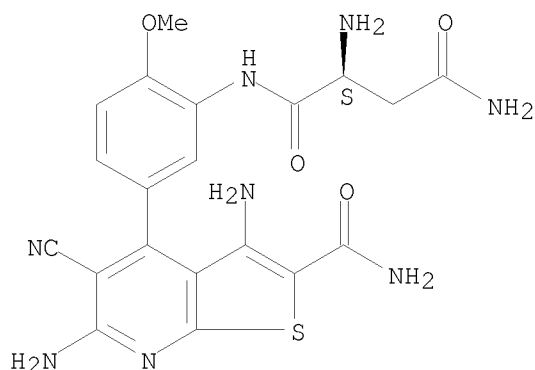
RN 916164-33-5 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-[3-[[ (2S)-2-amino-3-(1H-imidazol-5-yl)-1-oxopropyl]amino]-4-  
methoxyphenyl]-5-cyano- (CA INDEX NAME)

Absolute stereochemistry.



RN 916164-34-6 CAPLUS  
CN Butanediamide, 2-amino-N1-[5-[3,6-diamino-2-(aminocarbonyl)-5-  
cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]-, (2S)- (CA INDEX NAME)

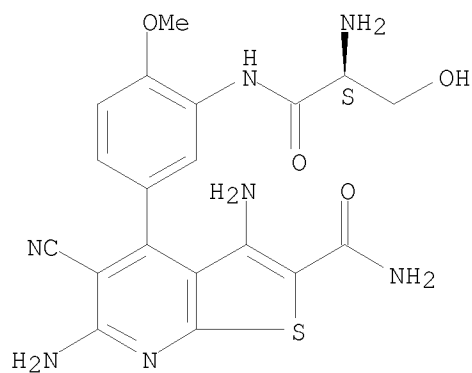
Absolute stereochemistry.



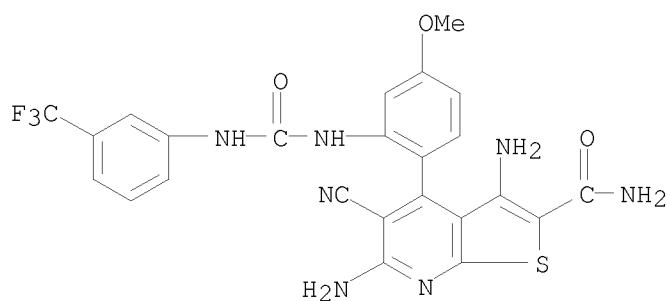
RN 916164-35-7 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-[3-[[ (2S)-2-amino-3-hydroxy-1-oxopropyl]amino]-4-  
methoxyphenyl]-5-cyano- (CA INDEX NAME)

Absolute stereochemistry.

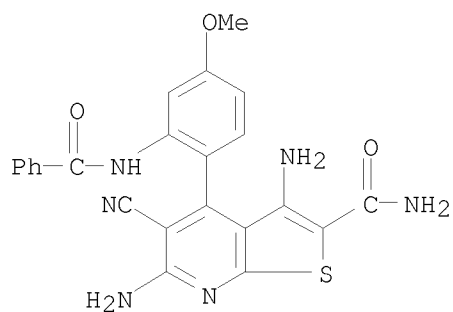
10/574,788



RN 916164-36-8 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-5-cyano-4-[4-methoxy-2-[[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]phenyl]- (CA INDEX NAME)

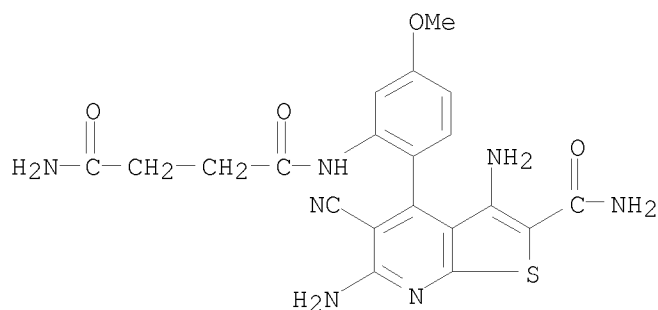


RN 916164-37-9 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-4-[2-(benzoylamino)-4-methoxyphenyl]-5-cyano- (CA INDEX NAME)

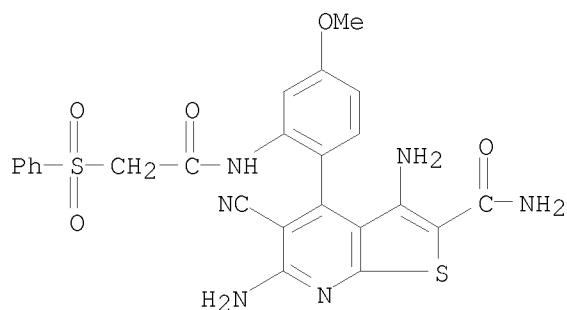


RN 916164-38-0 CAPLUS  
 CN Butanediamide, N1-[2-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-5-methoxyphenyl]- (CA INDEX NAME)

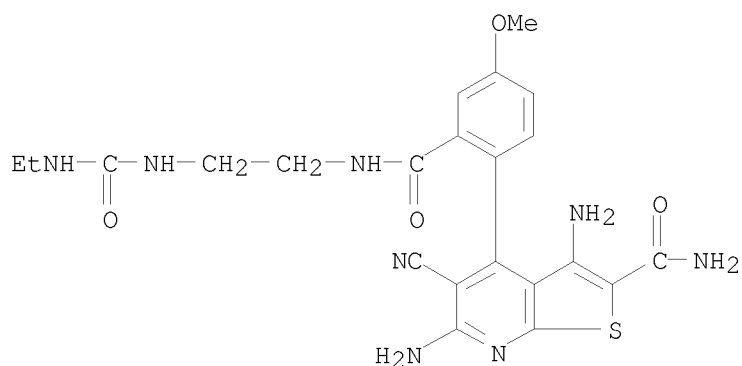
10/574,788



RN 916164-39-1 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-5-cyano-4-[4-methoxy-2-[[2-(phenylsulfonyl)acetyl]amino]phenyl]- (CA INDEX NAME)

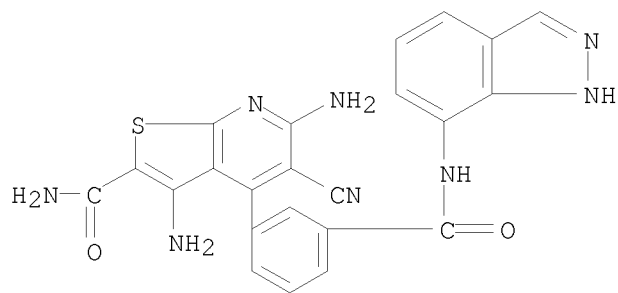


RN 916164-40-4 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-5-cyano-4-[2-[[[2-[[[(ethylamino)carbonyl]amino]ethyl]amino]carbonyl]-4-methoxyphenyl]- (CA INDEX NAME)

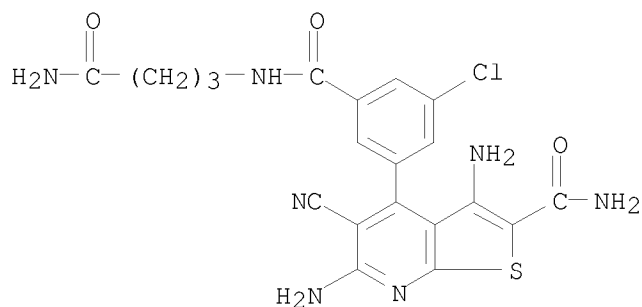


RN 916164-41-5 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-5-cyano-4-[3-[(1H-indazol-7-ylamino)carbonyl]phenyl]- (CA INDEX NAME)

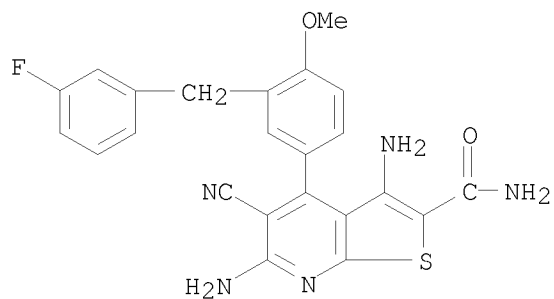
10/574,788



RN 916164-42-6 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-4-[3-[[ (4-amino-4-oxobutyl) amino]carbonyl]-5-chlorophenyl]-5-  
 cyano- (CA INDEX NAME)

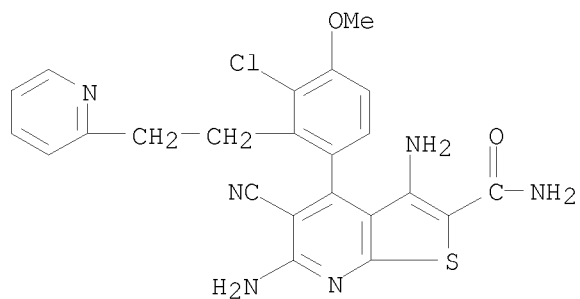


RN 916164-43-7 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-5-cyano-4-[3-[(3-fluorophenyl)methyl]-4-methoxyphenyl]- (CA  
 INDEX NAME)



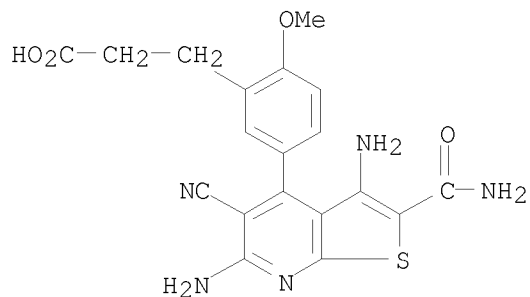
RN 916164-44-8 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-4-[3-chloro-4-methoxy-2-[2-(2-pyridinyl)ethyl]phenyl]-5-cyano-  
 (CA INDEX NAME)

10/574,788



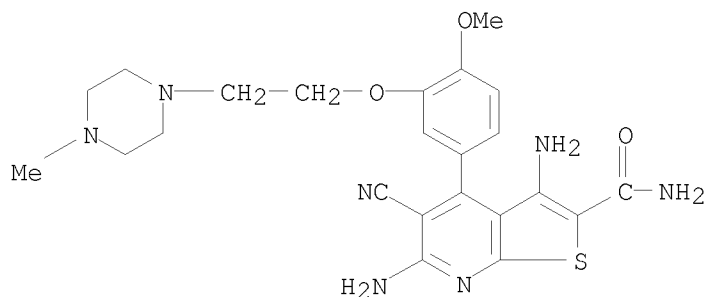
RN 916164-45-9 CAPLUS

CN Benzenepropanoic acid, 5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxy- (CA INDEX NAME)



RN 916164-46-0 CAPLUS

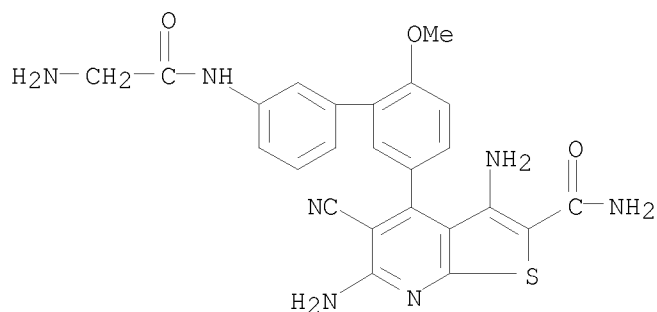
CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[2-(4-methyl-1-piperazinyl)ethoxy]phenyl]- (CA INDEX NAME)



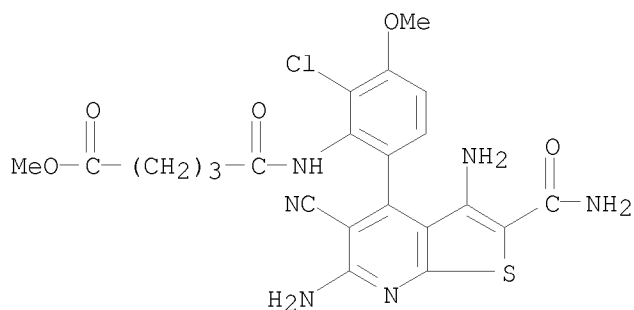
RN 916164-47-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-[3'-[(2-aminoacetyl)amino]-6-methoxy[1,1'-biphenyl]-3-yl]-5-cyano- (CA INDEX NAME)

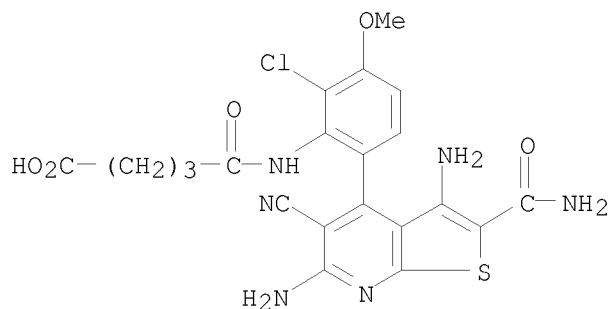
10/574,788



RN 916164-48-2 CAPLUS  
 CN Pentanoic acid, 5-[[2-chloro-6-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-3-methoxyphenyl]amino]-5-oxo-, methyl ester (CA INDEX NAME)

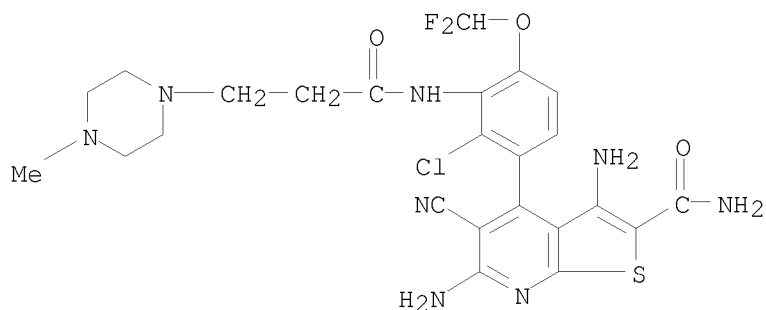


RN 916164-49-3 CAPLUS  
 CN Pentanoic acid, 5-[[2-chloro-6-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-3-methoxyphenyl]amino]-5-oxo- (CA INDEX NAME)



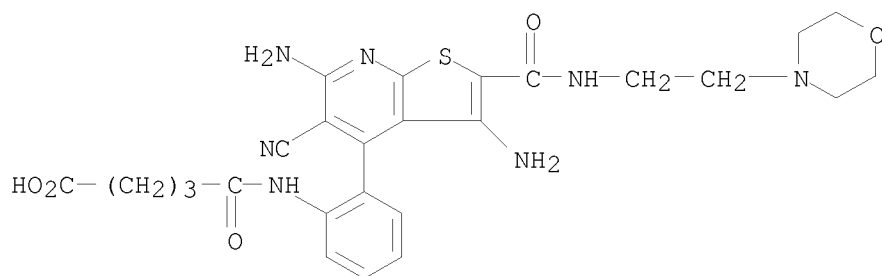
RN 916164-50-6 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-[2-chloro-4-(difluoromethoxy)-3-[[3-(4-methyl-1-piperazinyl)-1-oxopropyl]amino]phenyl]-5-cyano- (CA INDEX NAME)

10/574,788



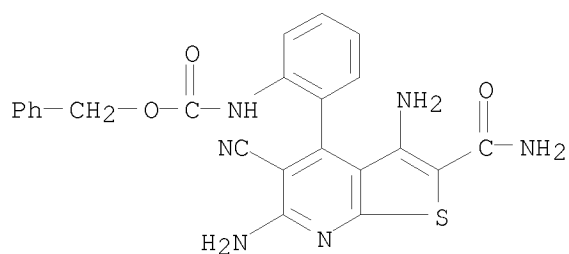
RN 916164-51-7 CAPLUS

CN Pentanoic acid, 5-[[2-[3,6-diamino-5-cyano-2-[[[2-(4-morpholinyl)ethyl]amino]carbonyl]thieno[2,3-b]pyridin-4-yl]phenyl]amino]-5-oxo- (CA INDEX NAME)



RN 916164-52-8 CAPLUS

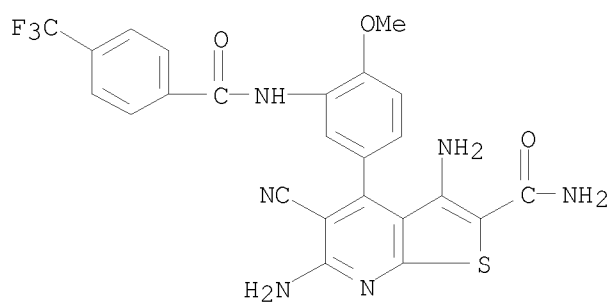
CN Carbamic acid, N-[2-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]phenyl]-, phenylmethyl ester (CA INDEX NAME)



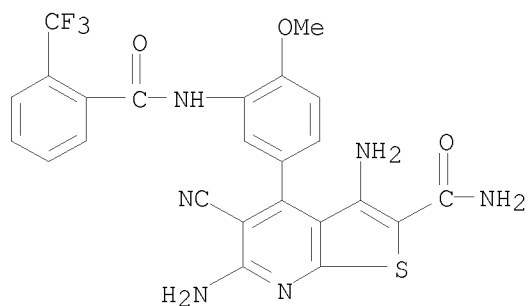
RN 916164-53-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[[4-(trifluoromethyl)benzoyl]amino]phenyl]- (CA INDEX NAME)

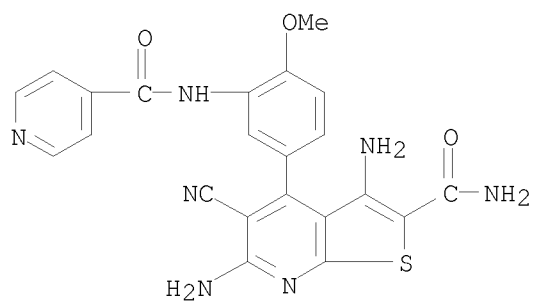
10/574,788



RN 916164-54-0 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-[[2-(trifluoromethyl)benzoyl]amino]phenyl]- (CA INDEX NAME)



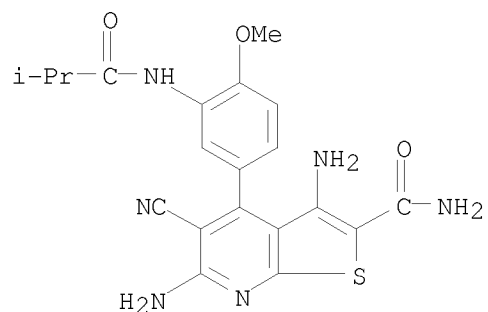
RN 916164-55-1 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-[(4-pyridinylcarbonyl)amino]phenyl]- (CA INDEX NAME)



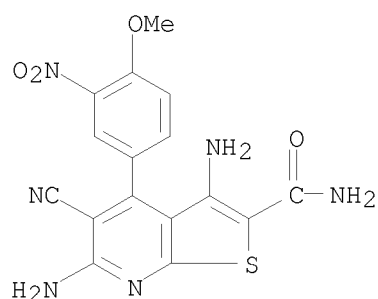
RN 916164-56-2 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-[(2-methyl-1-oxopropyl)amino]phenyl]- (CA INDEX NAME)



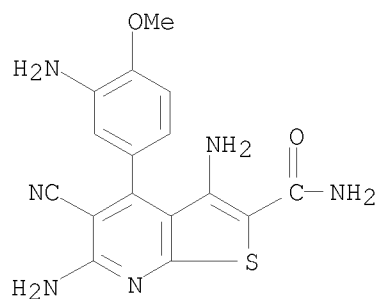
10/574,788



IT 916164-58-4P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-methoxy-3-nitrophenyl)thieno[2,3-b]pyridine 916164-59-5P,  
2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-amino-4-methoxyphenyl)thieno[2,3-b]pyridine  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of thieno[2,3-b]pyridines as HSP90 modulators)  
RN 916164-58-4 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(4-methoxy-3-nitrophenyl)- (CA INDEX NAME)



RN 916164-59-5 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(3-amino-4-methoxyphenyl)-5-cyano- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1226146 CAPLUS

DOCUMENT NUMBER: 146:13164

TITLE: Nitrogen-containing heterocyclic compounds as inhibitors of B-Raf kinase

INVENTOR(S): Gahman, Timothy C.; Lang, Hengyuan; Davis, Robert L.; Scranton, Shawn A.

PATENT ASSIGNEE(S): Kalypsys, Inc., USA

SOURCE: PCT Int. Appl., 114pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006124874	A2	20061123	WO 2006-US18885	20060511
WO 2006124874	A3	20070405		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				

PRIORITY APPLN. INFO.:	US	2005-680288P	P	20050512
	US	2005-680290P	P	20050512
	US	2005-680291P	P	20050512
	US	2005-680292P	P	20050512
	US	2005-680293P	P	20050512
	US	2005-680294P	P	20050512
	US	2005-680327P	P	20050512

OTHER SOURCE(S): MARPAT 146:13164

AB The present invention relates to compds. and methods useful as inhibitors of B-Raf for the treatment or prevention of cancer, including hematol. and non-hematol. malignancies, hematopoiesis, autoimmune diseases, dermatol. and ophthalmol. conditions.

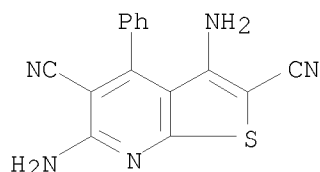
IT 331984-47-5

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nitrogen-containing heterocyclic compds. as inhibitors of B-Raf kinase)

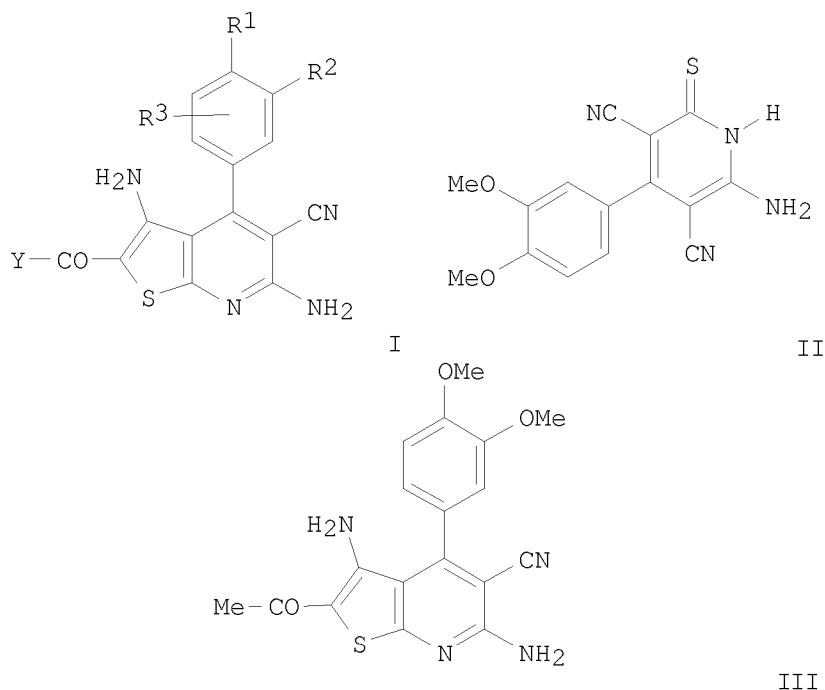
RN 331984-47-5 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3,6-diamino-4-phenyl- (CA INDEX NAME)



L7 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:912926 CAPLUS  
 DOCUMENT NUMBER: 145:292880  
 TITLE: Preparation of thienopyridines as heat shock protein  
 HSP-90 modulators  
 INVENTOR(S): Eggenweiler, Hans-Michael; Wolf, Michael  
 PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany  
 SOURCE: Ger. Offen., 80pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102005009440	A1	20060907	DE 2005-102005009440	20050302
AU 2006220095	A1	20060908	AU 2006-220095	20060210
CA 2599826	A1	20060908	CA 2006-2599826	20060210
WO 2006092202	A1	20060908	WO 2006-EP1178	20060210
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1853609	A1	20071114	EP 2006-706808	20060210
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
JP 2008531611	T	20080814	JP 2007-557355	20060210
MX 200710562	A	20071004	MX 2007-10562	20070829
CN 101133063	A	20080227	CN 2006-80006570	20070830
KR 2007107092	A	20071106	KR 2007-719900	20070831
IN 2007KN03649	A	20080530	IN 2007-KN3649	20070927
PRIORITY APPLN. INFO.:			DE 2005-102005009440A	20050302
			WO 2006-EP1178	W 20060210
OTHER SOURCE(S):			CASREACT 145:292880; MARPAT 145:292880	
GI				



- AB Title compds. I [Y = OH, SH, NH<sub>2</sub>, etc.; R<sub>1</sub> = halo, OH, SH, etc.; R<sub>2</sub> = H, halo, etc.; R<sub>3</sub> = H, halo, CN, etc.] and their pharmaceutically acceptable salts and formulations were prepared For example, condensation-cyclization of chloroacetamide and thioxopyridine II afforded claimed thienopyridine III. Compds. I are claimed to be modulators of shock protein HSP-90 (no data provided).
- IT 309291-64-3P, 2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)thieno[2,3-b]pyridine 328109-88-2P, 2-Ethoxycarbonyl-3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)thieno[2,3-b]pyridine 331984-46-4P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-phenylthieno[2,3-b]pyridine 351166-68-2P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3,4,5-trimethoxyphenyl)thieno[2,3-b]pyridine 361478-09-3P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)thieno[2,3-b]pyridine 383156-16-9P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-chlorophenyl)thieno[2,3-b]pyridine 908590-80-7P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,4-dimethoxyphenyl)thieno[2,3-b]pyridine 908590-81-8P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,5-dimethoxyphenyl)thieno[2,3-b]pyridine 908590-82-9P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,3-dimethoxyphenyl)thieno[2,3-b]pyridine 908590-83-0P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-methoxyphenyl)thieno[2,3-b]pyridine 908590-84-1P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,4,5-trimethoxyphenyl)thieno[2,3-b]pyridine 908590-85-2P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,3,4-trimethoxyphenyl)thieno[2,3-b]pyridine 908590-86-3P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-hydroxyphenyl)thieno[2,3-b]pyridine 908590-87-4P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-

trifluoromethoxyphenyl)thieno[2,3-b]pyridine 908590-88-5P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-methylsulfanylphenyl)thieno[2,3-b]pyridine 908590-89-6P,  
 2-(N-Methylaminocarbonyl)-3,6-diamino-5-cyano-4-(3-hydroxy-4-methoxyphenyl)thieno[2,3-b]pyridine 908590-90-9P,  
 2-(N-Methylaminocarbonyl)-3,6-diamino-5-cyano-4-(3-hydroxyphenyl)thieno[2,3-b]pyridine 908590-91-0P,  
 2-(N-Methylaminocarbonyl)-3,6-diamino-5-cyano-4-(3-hydroxy-4-trifluoromethoxyphenyl)thieno[2,3-b]pyridine 908590-92-1P,  
 2-(N-Methylaminocarbonyl)-3,6-diamino-5-cyano-4-(3-hydroxy-4-methylsulfanylphenyl)thieno[2,3-b]pyridine 908590-93-2P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4,5-dimethoxyphenyl)thieno[2,3-b]pyridine 908590-94-3P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2-bromo-5-hydroxyphenyl)thieno[2,3-b]pyridine 908590-95-4P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-difluoromethoxy-3-hydroxyphenyl)thieno[2,3-b]pyridine 908590-96-5P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-methyl-3-hydroxyphenyl)thieno[2,3-b]pyridine 908590-97-6P 908590-98-7P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(4-(ethoxycarbonyl)butoxy)-4-methoxyphenyl]thieno[2,3-b]pyridine 908590-99-8P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(4-(carboxy)butoxy)-4-methoxyphenyl]thieno[2,3-b]pyridine 908591-00-4P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(5-(carboxy)pentoxy)-4-methoxyphenyl]thieno[2,3-b]pyridine 908591-01-5P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(3-(ethoxycarbonyl)propoxy)-4-methoxyphenyl]thieno[2,3-b]pyridine 908591-02-6P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(3-(carboxy)propoxy)-4-methoxyphenyl]thieno[2,3-b]pyridine 908591-03-7P,  
 2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-methoxyphenyl)thieno[2,3-b]pyridine 908591-04-8P,  
 2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3-hydroxyphenyl)thieno[2,3-b]pyridine 908591-05-9P,  
 2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-trifluoromethoxyphenyl)thieno[2,3-b]pyridine 908591-06-0P,  
 2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-methylsulfanylphenyl)thieno[2,3-b]pyridine 908591-07-1P  
 908591-08-2P 908591-09-3P 908591-10-6P  
 908591-11-7P 908591-12-8P 908591-13-9P  
 908591-14-0P 908591-15-1P 908591-16-2P  
 908591-17-3P 908591-18-4P 908591-19-5P  
 908591-20-8P 908591-21-9P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2-methoxyphenyl)thieno[2,3-b]pyridine 908591-22-0P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,4-dichlorophenyl)thieno[2,3-b]pyridine 908591-23-1P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-chlorophenyl)thieno[2,3-b]pyridine 908591-24-2P,  
 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2-chlorophenyl)thieno[2,3-b]pyridine

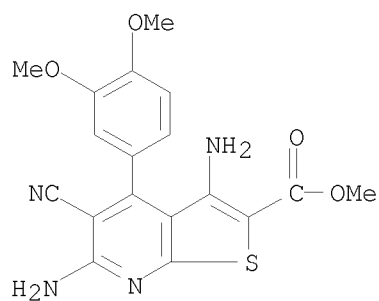
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thienopyridines as heat shock protein HSP-90 modulators)

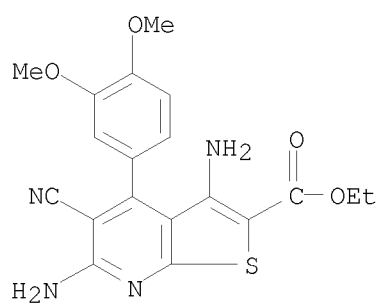
RN 309291-64-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
 3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)-, methyl ester (CA INDEX NAME)

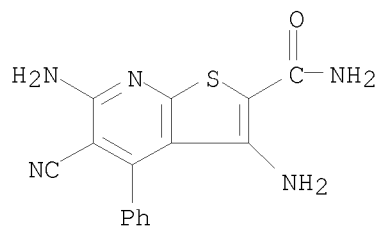
10/574,788



RN 328109-88-2 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)-, ethyl ester (CA INDEX NAME)

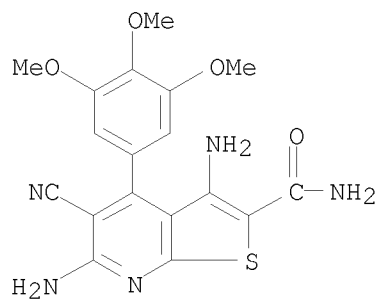


RN 331984-46-4 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-phenyl- (CA INDEX NAME)

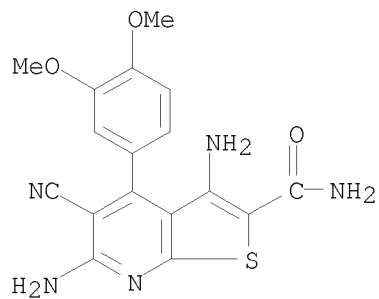


RN 351166-68-2 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

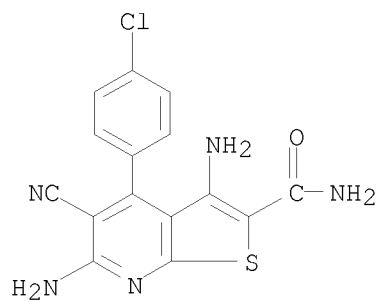
10/574,788



RN 361478-09-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)- (CA INDEX NAME)

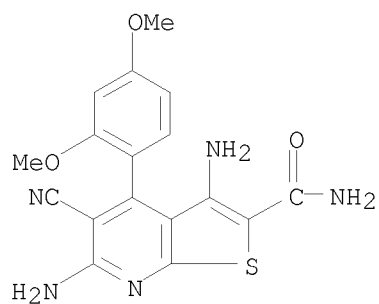


RN 383156-16-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(4-chlorophenyl)-5-cyano- (CA INDEX NAME)

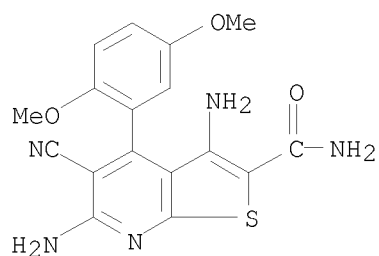


RN 908590-80-7 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(2,4-dimethoxyphenyl)- (CA INDEX NAME)

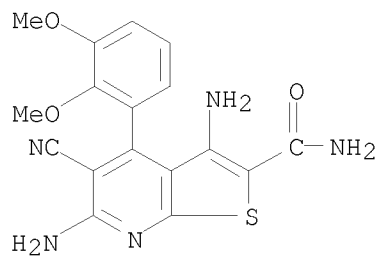
10/574,788



RN 908590-81-8 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



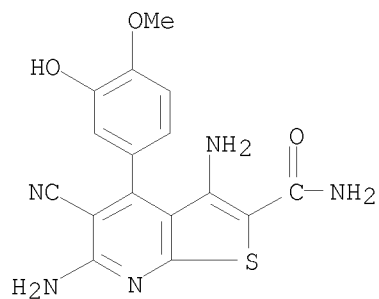
RN 908590-82-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(2,3-dimethoxyphenyl)- (CA INDEX NAME)



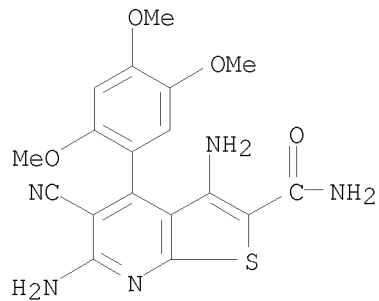
RN 908590-83-0 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3-hydroxy-4-methoxyphenyl)- (CA INDEX NAME)



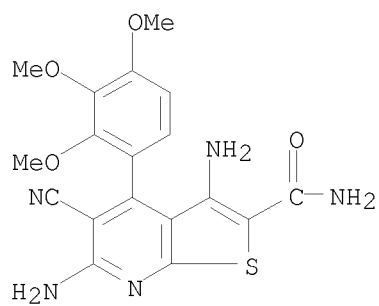
10/574,788



RN 908590-84-1 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(2,4,5-trimethoxyphenyl)- (CA INDEX NAME)

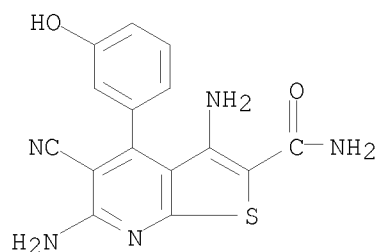


RN 908590-85-2 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(2,3,4-trimethoxyphenyl)- (CA INDEX NAME)

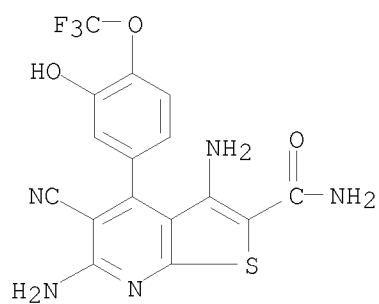


RN 908590-86-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3-hydroxyphenyl)- (CA INDEX NAME)

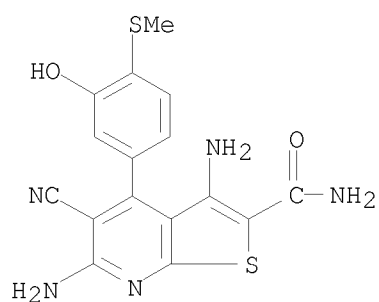
10/574,788



RN 908590-87-4 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[3-hydroxy-4-(trifluoromethoxy)phenyl]- (CA INDEX  
NAME)

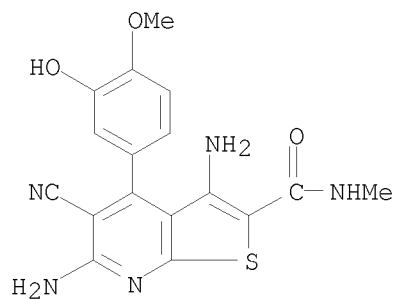


RN 908590-88-5 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[3-hydroxy-4-(methylthio)phenyl]- (CA INDEX NAME)



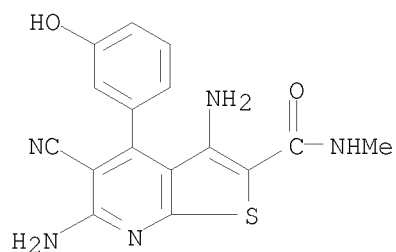
RN 908590-89-6 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3-hydroxy-4-methoxyphenyl)-N-methyl- (CA INDEX  
NAME)

10/574,788



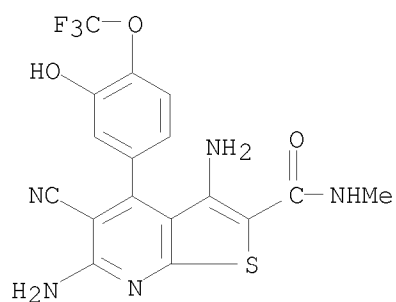
RN 908590-90-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3-hydroxyphenyl)-N-methyl- (CA INDEX NAME)



RN 908590-91-0 CAPLUS

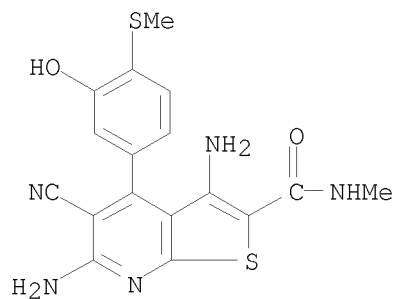
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[3-hydroxy-4-(trifluoromethoxy)phenyl]-N-methyl-  
(CA INDEX NAME)



RN 908590-92-1 CAPLUS

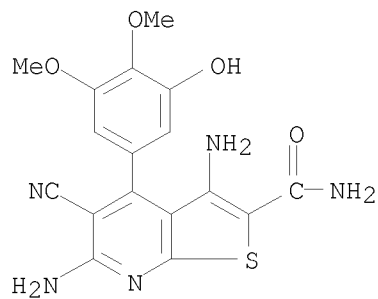
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[3-hydroxy-4-(methylthio)phenyl]-N-methyl- (CA  
INDEX NAME)

10/574,788



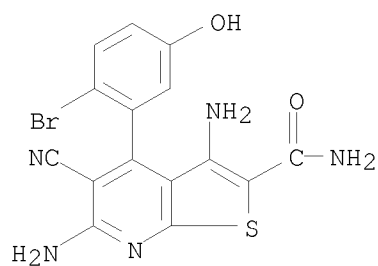
RN 908590-93-2 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3-hydroxy-4,5-dimethoxyphenyl)- (CA INDEX NAME)



RN 908590-94-3 CAPLUS

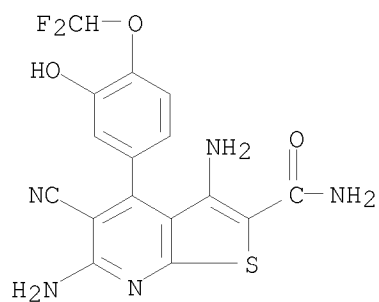
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(2-bromo-5-hydroxyphenyl)-5-cyano- (CA INDEX NAME)



RN 908590-95-4 CAPLUS

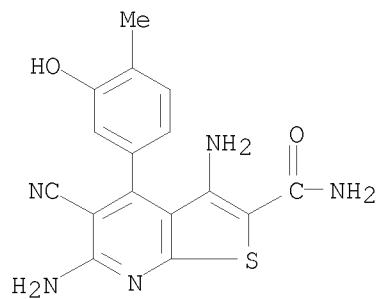
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-(difluoromethoxy)-3-hydroxyphenyl]- (CA INDEX NAME)

10/574,788



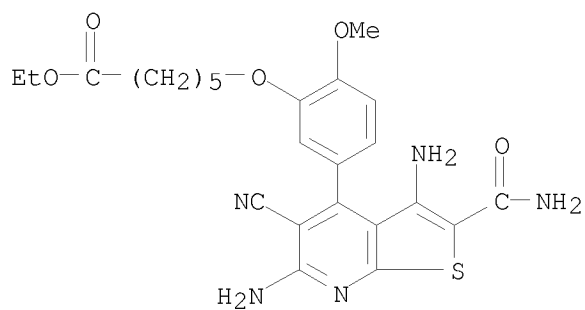
RN 908590-96-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3-hydroxy-4-methylphenyl)- (CA INDEX NAME)



RN 908590-97-6 CAPLUS

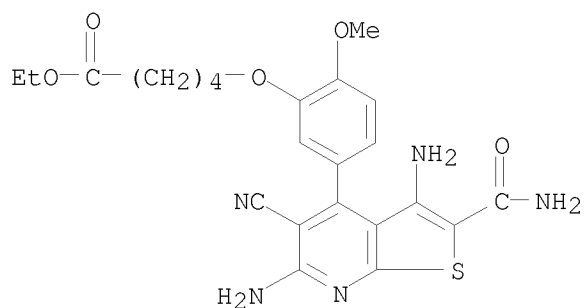
CN Hexanoic acid, 6-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]-, ethyl ester (CA INDEX NAME)



RN 908590-98-7 CAPLUS

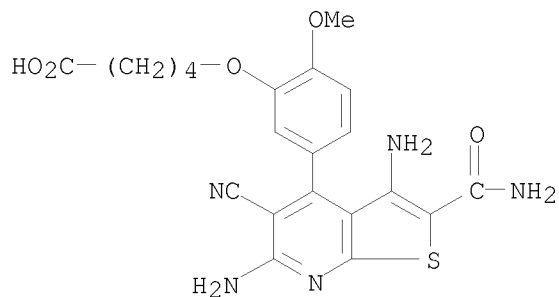
CN Pentanoic acid, 5-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]-, ethyl ester (CA INDEX NAME)

10/574,788



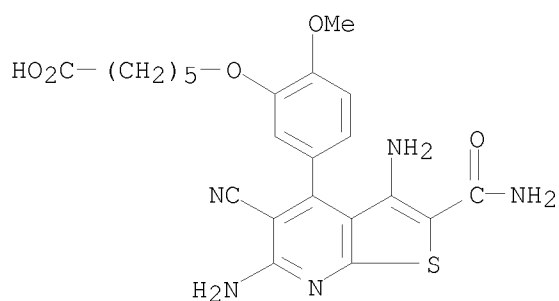
RN 908590-99-8 CAPLUS

CN Pentanoic acid, 5-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]- (CA INDEX NAME)



RN 908591-00-4 CAPLUS

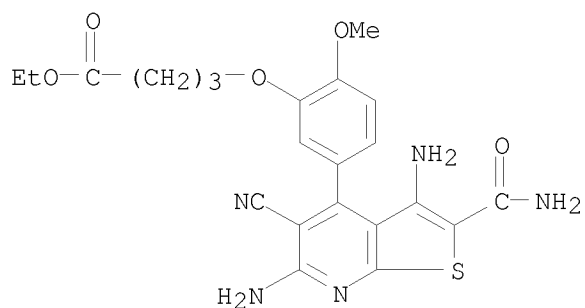
CN Hexanoic acid, 6-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]- (CA INDEX NAME)



RN 908591-01-5 CAPLUS

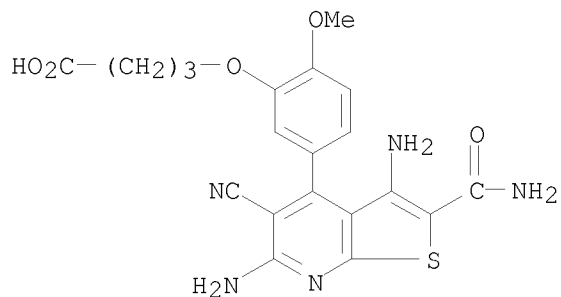
CN Butanoic acid, 4-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]-, ethyl ester (CA INDEX NAME)

10/574,788



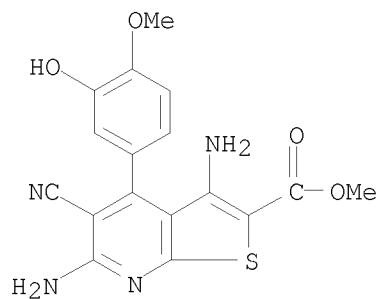
RN 908591-02-6 CAPLUS

CN Butanoic acid, 4-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]- (CA INDEX NAME)



RN 908591-03-7 CAPLUS

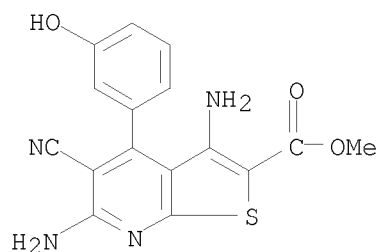
CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-(3-hydroxy-4-methoxyphenyl)-, methyl ester (CA INDEX NAME)



RN 908591-04-8 CAPLUS

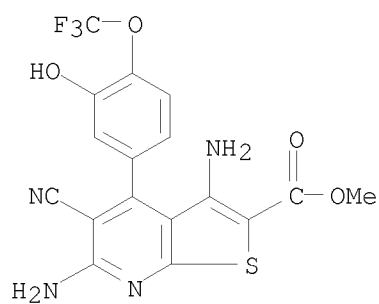
CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-(3-hydroxyphenyl)-, methyl ester (CA INDEX NAME)

10/574,788



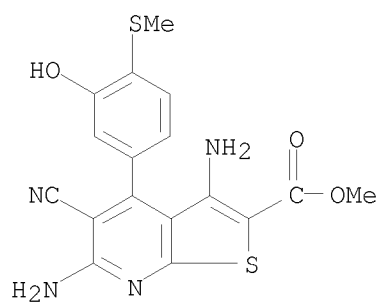
RN 908591-05-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3,6-diamino-5-cyano-4-[3-hydroxy-4-(trifluoromethoxy)phenyl]-, methyl  
ester (CA INDEX NAME)



RN 908591-06-0 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3,6-diamino-5-cyano-4-[3-hydroxy-4-(methylthio)phenyl]-, methyl ester (CA  
INDEX NAME)

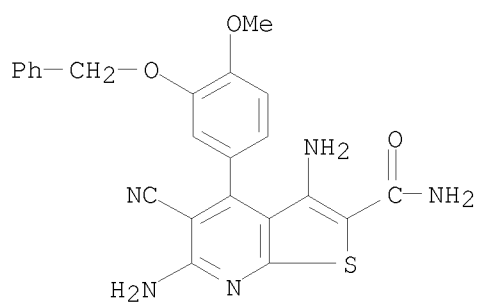


RN 908591-07-1 CAPLUS

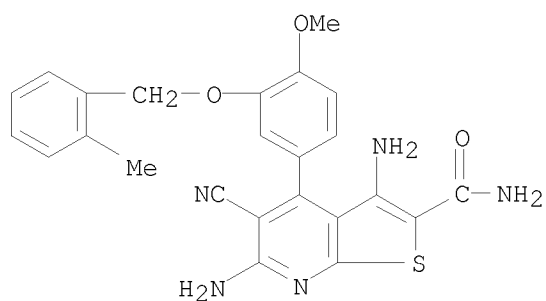
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-(phenylmethoxy)phenyl]- (CA INDEX  
NAME)



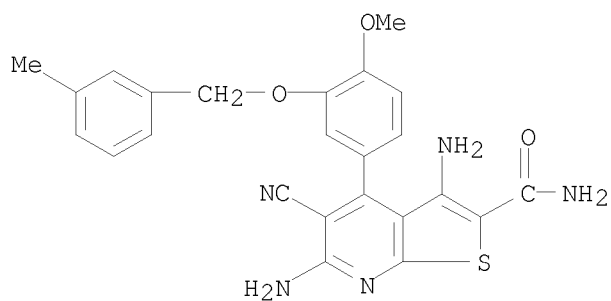
10/574,788



RN 908591-08-2 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-[(2-methylphenyl)methoxy]phenyl]- (CA  
INDEX NAME)

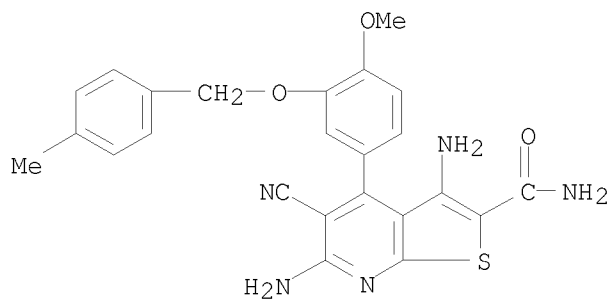


RN 908591-09-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-[(3-methylphenyl)methoxy]phenyl]- (CA  
INDEX NAME)

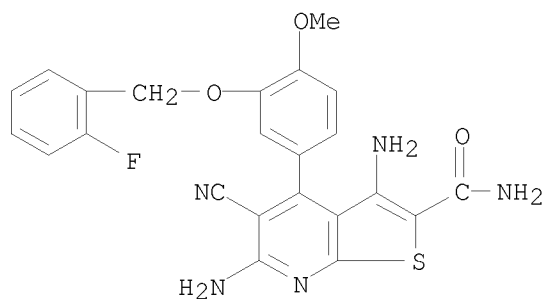


RN 908591-10-6 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-[(4-methylphenyl)methoxy]phenyl]- (CA  
INDEX NAME)

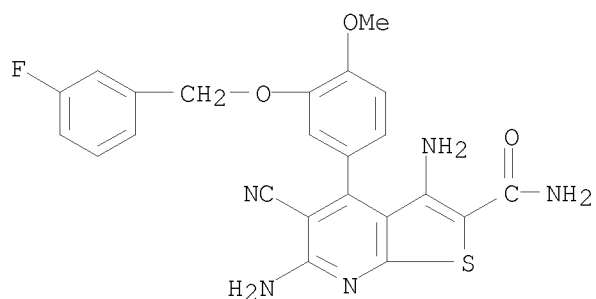
10/574,788



RN 908591-11-7 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[3-[(2-fluorophenyl)methoxy]-4-methoxyphenyl]- (CA  
INDEX NAME)

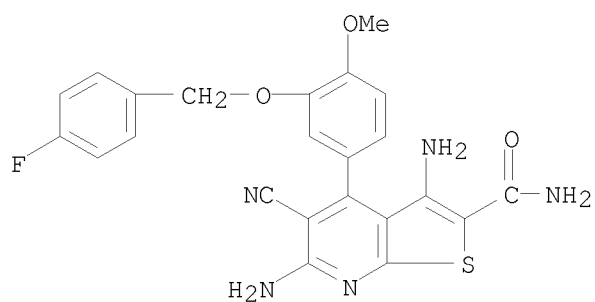


RN 908591-12-8 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[3-[(3-fluorophenyl)methoxy]-4-methoxyphenyl]- (CA  
INDEX NAME)

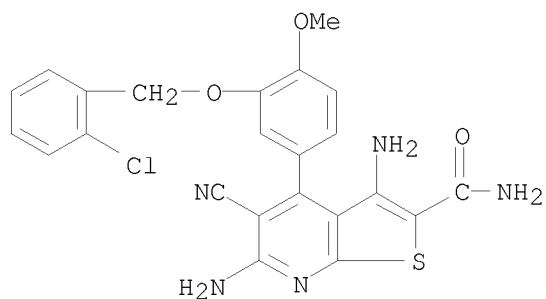


RN 908591-13-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[3-[(4-fluorophenyl)methoxy]-4-methoxyphenyl]- (CA  
INDEX NAME)

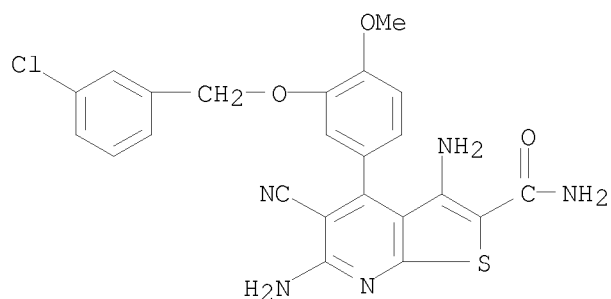
10/574,788



RN 908591-14-0 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-[(3-[(2-chlorophenyl)methoxy]-4-methoxyphenyl)-5-cyano- (CA  
INDEX NAME)

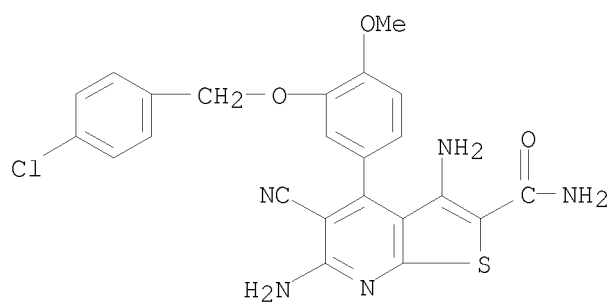


RN 908591-15-1 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-[(3-[(3-chlorophenyl)methoxy]-4-methoxyphenyl)-5-cyano- (CA  
INDEX NAME)

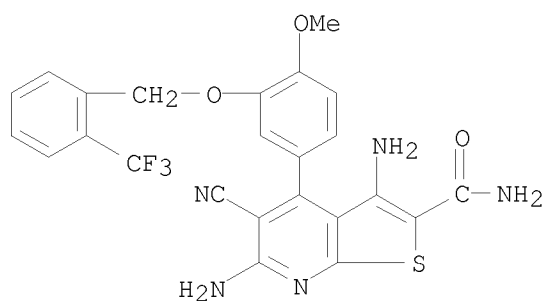


RN 908591-16-2 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-[(3-[(4-chlorophenyl)methoxy]-4-methoxyphenyl)-5-cyano- (CA  
INDEX NAME)

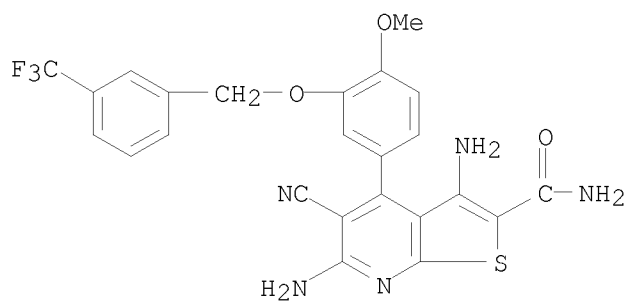
10/574,788



RN 908591-17-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-[[2-(trifluoromethyl)phenyl]methoxy]phenyl]- (CA INDEX NAME)

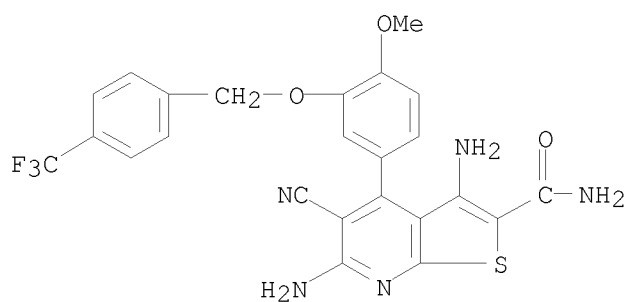


RN 908591-18-4 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-[[3-(trifluoromethyl)phenyl]methoxy]phenyl]- (CA INDEX NAME)

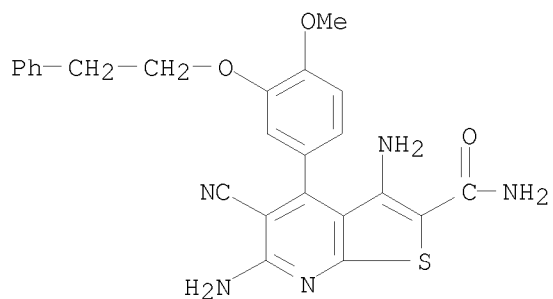


RN 908591-19-5 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-[[4-(trifluoromethyl)phenyl]methoxy]phenyl]- (CA INDEX NAME)

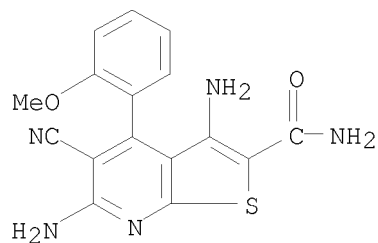
10/574,788



RN 908591-20-8 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-methoxy-3-(2-phenylethoxy)phenyl]- (CA INDEX  
NAME)

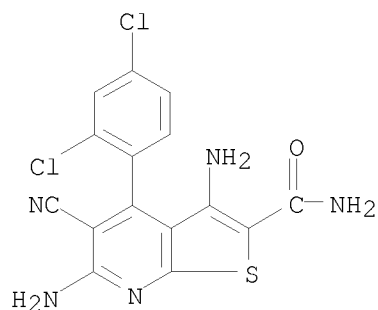


RN 908591-21-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(2-methoxyphenyl)- (CA INDEX NAME)



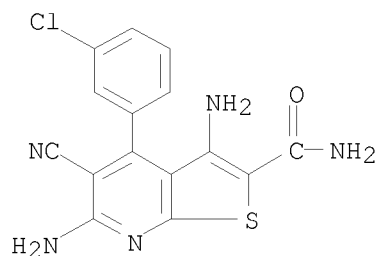
RN 908591-22-0 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(2,4-dichlorophenyl)- (CA INDEX NAME)

10/574,788



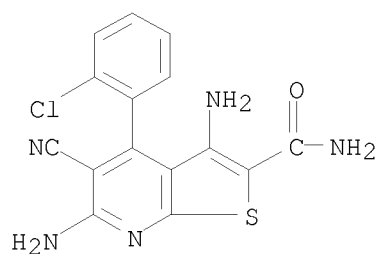
RN 908591-23-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(3-chlorophenyl)-5-cyano- (CA INDEX NAME)



RN 908591-24-2 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(2-chlorophenyl)-5-cyano- (CA INDEX NAME)



L7 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1273640 CAPLUS

DOCUMENT NUMBER: 144:63952

TITLE: New class of competitive inhibitor of bacterial  
histidine kinases

AUTHOR(S): Gilmour, Raymond; Foster, J. Estelle; Sheng, Qin;  
McClain, Jonathan R.; Riley, Anna; Sun, Pei-Ming; Ng,  
Wai-Leung; Yan, Dalai; Nicas, Thalia I.; Henry,  
Kenneth; Winkler, Malcolm E.

CORPORATE SOURCE: Eli Lilly and Company, Indianapolis, IN, 46285, USA

SOURCE: Journal of Bacteriology (2005), 187(23), 8196-8200  
CODEN: JOBAAY; ISSN: 0021-9193

PUBLISHER: American Society for Microbiology

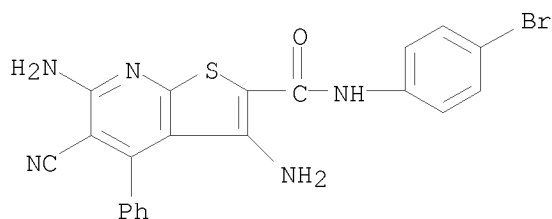
DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Bacterial histidine kinases have been proposed as targets for the discovery of new antibiotics, yet few specific inhibitors of bacterial histidine kinases have been reported. We report here a novel thienopyridine (TEP) compound that inhibits bacterial histidine kinases competitively with respect to ATP but does not comparably inhibit mammalian serine/threonine kinases. Although it partitions into membranes and does not inhibit the growth of bacterial or mammalian cells, TEP could serve as a starting compound for a new class of histidine kinase inhibitors with antibacterial activity.

IT 332175-01-6  
 RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (thienopyridine compound is new class of competitive inhibitor of bacterial histidin kinase autophosphorylation)

RN 332175-01-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-N-(4-bromophenyl)-5-cyano-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:567123 CAPLUS

DOCUMENT NUMBER: 143:97338

TITLE: Preparation of  
 3-amino-5-cyanothieno[2,3-b]pyridine-2-carboxamides as  
 IKK2 inhibitors for the treatment of HBV infection  
 INVENTOR(S): Chen, Huanming; Zhang, Weijian; Tam, Robert; Raney,  
 Anneke K.

PATENT ASSIGNEE(S): Ribapharm, Inc., USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005058315	A1	20050630	WO 2004-US41632	20041213
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,				

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

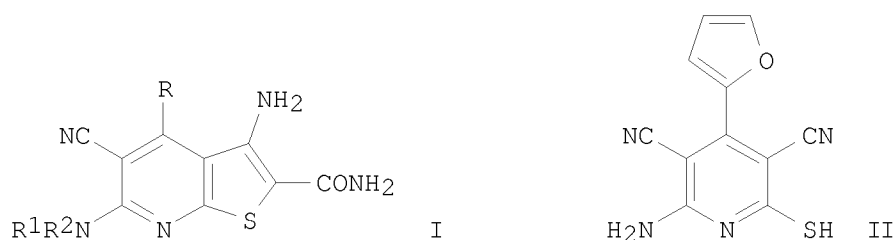
US 2003-529160P

P 20031212

OTHER SOURCE(S):

CASREACT 143:97338; MARPAT 143:97338

GI



AB Title compds. I [wherein R = (un)substituted heterocycle, alkyl; R1, R2 = H, alkyl, arylamino; etc., with some limitations] were prepared as IKK2 inhibitors. For instance, piperidine-catalyzed cyclization of furan-2-carboxaldehyde, malononitrile and 2-cyanothioacetamide gave thiol II (67% yield), which underwent S-alkylation with 2-bromoacetamide (68% yield) followed by KOEt-mediated intramol. cyclization to afford I (R = furan-2-yl, R1 = R2 = H) (62% yield). This product showed activity in the IKK2 inhibition assay (IC50 > 10  $\mu$ M) and HBV screening assay (EC50 = 1-10  $\mu$ M). Therefore, the invented compds. and their pharmaceutical compns. are useful for treating Hepatitis B infection and other diseases.

IT 383156-16-9P, 3,6-Diamino-4-(4-chlorophenyl)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-14-9P,  
 3,6-Diamino-5-cyano-4-(3,4-dihydroxyphenyl)thieno[2,3-b]pyridine-2-carboxamide 856175-16-1P,  
 3,6-Diamino-5-cyano-4-(3,5-dimethoxyphenyl)thieno[2,3-b]pyridine-2-carboxamide 856175-17-2P,  
 4-(3,6-Diamino-2-carbamoyl-5-cyanothieno[2,3-b]pyridin-4-yl)benzoic acid 856175-18-3P, 4-(3,6-Diamino-2-carbamoyl-5-cyanothieno[2,3-b]pyridin-4-yl)benzoic acid methyl ester 856175-19-4P,  
 3,6-Diamino-4-(3-bromophenyl)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-21-8P, 3,6-Diamino-4-(3-fluorophenyl)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-22-9P,  
 3,6-Diamino-4-(4-trifluoromethylphenyl)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-24-1P,  
 3,6-Diamino-4-(4-cyanophenyl)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-25-2P, 3,6-Diamino-4-(4-fluorophenyl)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-27-4P,  
 3,6-Diamino-5-cyano-4-[3-[[3-(piperidin-1-yl)propionyl]amino]phenyl]thieno[2,3-b]pyridine-2-carboxamide  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

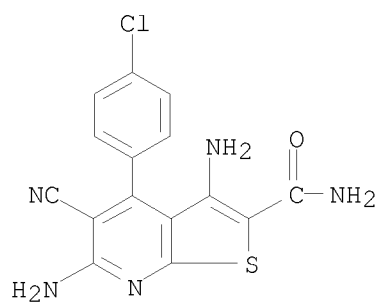
(inhibitor; preparation of thienopyridinecarboxamides as IKK2 inhibitors for the treatment of HBV infection)

RN 383156-16-9 CAPLUS

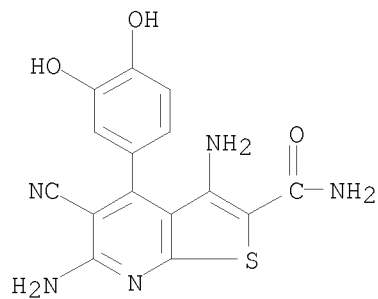
CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-4-(4-chlorophenyl)-5-cyano- (CA INDEX NAME)



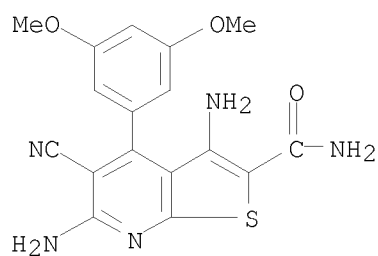
10/574,788



RN 856175-14-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3,4-dihydroxyphenyl)- (CA INDEX NAME)

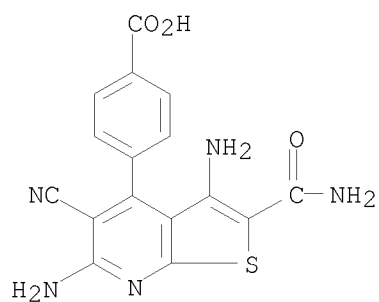


RN 856175-16-1 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3,5-dimethoxyphenyl)- (CA INDEX NAME)



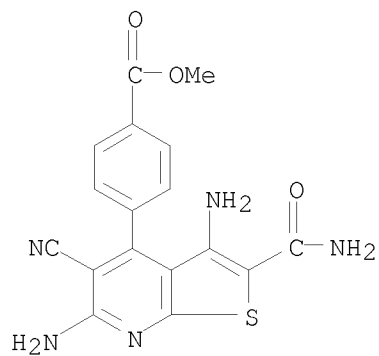
RN 856175-17-2 CAPLUS  
CN Benzoic acid, 4-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]- (CA INDEX NAME)

10/574,788



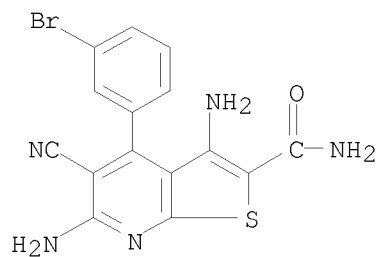
RN 856175-18-3 CAPLUS

CN Benzoic acid, 4-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-, methyl ester (CA INDEX NAME)



RN 856175-19-4 CAPLUS

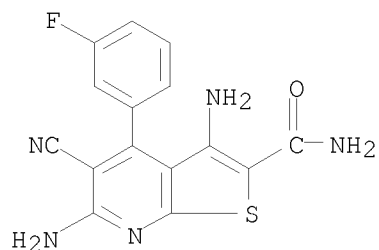
CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(3-bromophenyl)-5-cyano- (CA INDEX NAME)



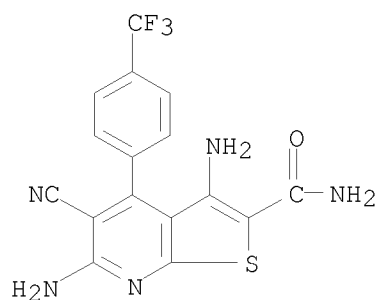
RN 856175-21-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(3-fluorophenyl)- (CA INDEX NAME)

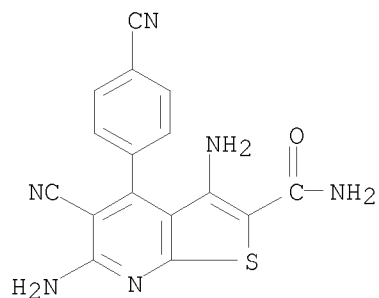
10/574,788



RN 856175-22-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

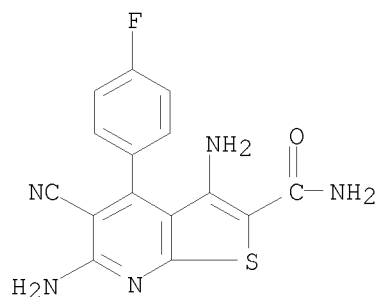


RN 856175-24-1 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(4-cyanophenyl)- (CA INDEX NAME)

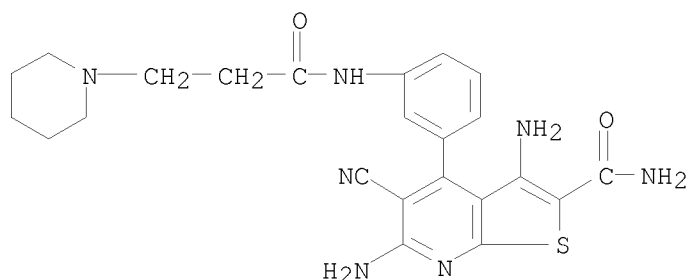


RN 856175-25-2 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(4-fluorophenyl)- (CA INDEX NAME)

10/574,788

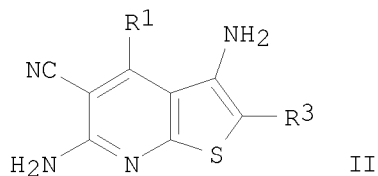
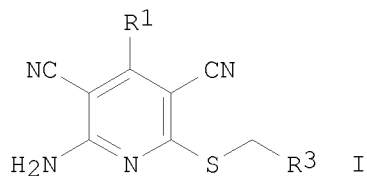


RN 856175-27-4 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[3-[[1-oxo-3-(1-piperidinyl)propyl]amino]phenyl]-  
(CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2005:482460 CAPLUS  
DOCUMENT NUMBER: 144:212685  
TITLE: Multicomponent synthesis of functionally substituted  
2-alkylthiopyridines and thieno[2,3-b]pyridines  
AUTHOR(S): Dyachenko, V. D.; Krasnikov, D. A.  
CORPORATE SOURCE: Nats. Pedagog. Univ. im. Tarasa Shevchenko, Luhansk,  
Ukraine  
SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition)  
(2005), 71(5-6), 86-92  
CODEN: UKZHAU; ISSN: 0041-6045  
PUBLISHER: Institut Obshchei i Neorganicheskoi Khimii im. V. I.  
Vernadskogo NAN Ukrainy  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
OTHER SOURCE(S): CASREACT 144:212685  
GI



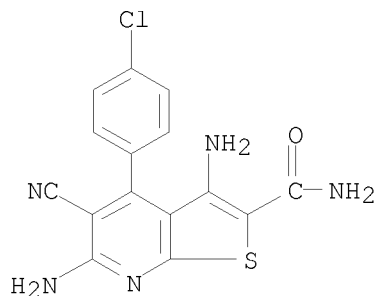
AB Reactions of [aryl(heteroaryl)methylene]cyanothioacetamides  
 $R^1CH:C(CN)C(S)NH_2$  ( $R^1$  = 2-furyl, Ph, 4-ClC<sub>6</sub>H<sub>4</sub>) with cyanoacetanilides  
 $NCCH_2CONHR^2$  ( $R^2$  = 2-ClC<sub>6</sub>H<sub>4</sub>, 2-MeOC<sub>6</sub>H<sub>4</sub>) or cyanothioacetamide and  
 functionalized alkyl halides  $R^3CH_2X$  ( $R^3$  = H<sub>2</sub>NCO, MeO<sub>2</sub>C, 4-BrC<sub>6</sub>H<sub>4</sub>CO,  
 HC.tplbond.C, CN, etc.; X = Cl, Br, iodo) in the presence of N-Et  
 morpholine were applied for synthesis of a series of  
 2-alkylthio-6-amino-4-aryl(heteroaryl)-3,5-dicyanopyridines I and  
 3,6-diamino-4-aryl(heteroaryl)-5-cyanothieno[2,3-b]pyridines II.

IT 383156-16-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (multicomponent preparation of functionally substituted  
 (alkylthio) (amino) dicyanopyridines and  
 diamino(cyano)thieno[2,3-b]pyridines from (cyano)thioacetamides,  
 cyanoacetamides and functionalized alkyl halides)

RN 383156-16-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3,6-diamino-4-(4-chlorophenyl)-5-cyano- (CA INDEX NAME)



L7 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:346859 CAPLUS

DOCUMENT NUMBER: 142:411342

TITLE: Preparation of pyridothiophene compounds as HSP90  
 inhibitors

INVENTOR(S): Drysdale, Martin James; Dymock, Brian William;  
 Barril-Alonso, Xavier

PATENT ASSIGNEE(S): Vernalis Cambridge Limited, UK

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

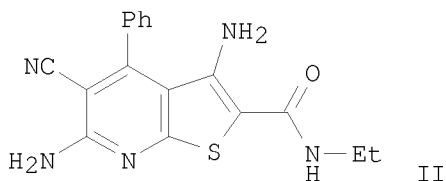
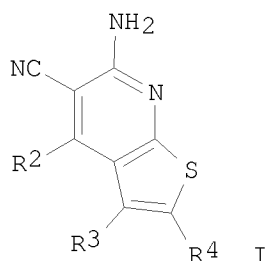
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

WO 2005034950 A1 20050421 WO 2004-GB4216 20041005  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
SN, TD, TG  
EP 1680108 A1 20060719 EP 2004-768755 20041005  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK  
US 20070213328 A1 20070913 US 2007-574788 20070119  
PRIORITY APPLN. INFO.: GB 2003-23810 A 20031010  
WO 2004-GB4216 W 20041005  
OTHER SOURCE(S): CASREACT 142:411342; MARPAT 142:411342  
GI

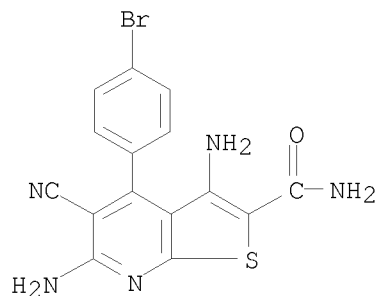


AB The title compds. I [R2 = (Ar1)<sub>m</sub>(Alk1)<sub>p</sub>(Z)<sub>r</sub>(Alk2)<sub>s</sub>Q (wherein Ar1 = (un)substituted (hetero)aryl, Alk1, Alk2 = (un)substituted alkylene, alkenylene; m, p, r and s = 0-1; Z = O, S, CO, CS, etc.; Q = H, (un)substituted carbocyclic or heterocyclic); R3 = H, (un)substituted alkyl, (hetero)aryl, etc.; R4 = carboxylic ester, carboxamide or sulfonamide group], useful in therapy, particularly for the treatment of a disorder mediated by excessive or inappropriate HSP90 activity, were prepared E.g., a multi-step synthesis of II, starting from malononitrile and benzaldehyde, was given. The compound II showed IC<sub>50</sub> of <10 μM against HSP90 binding in fluorescence polarization assay. The pharmaceutical composition comprising the compound I is disclosed.

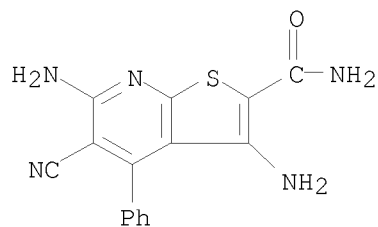
IT 208254-40-4P 331984-46-4P 342384-57-0P  
361178-59-8P 361477-78-3P 361478-09-3P  
369394-78-5P 369609-75-6P 383156-16-9P  
476319-10-5P 850448-55-4P 850448-56-5P  
850448-57-6P 850448-58-7P 850448-59-8P  
850448-60-1P 850448-61-2P 850448-62-3P  
850448-63-4P 850448-64-5P 850448-65-6P  
850448-66-7P 850448-67-8P 850448-68-9P  
850448-69-0P 850448-70-3P 850448-71-4P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of thienopyridines as HSP90 inhibitors)

10/574,788

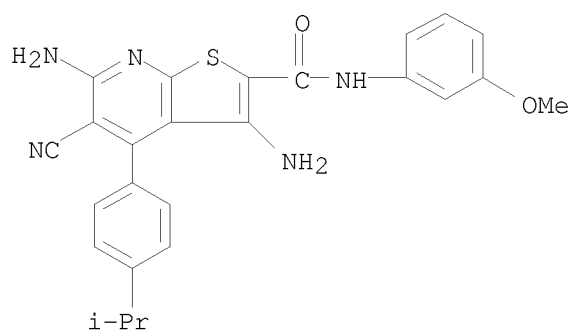
RN 208254-40-4 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(4-bromophenyl)-5-cyano- (CA INDEX NAME)



RN 331984-46-4 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-phenyl- (CA INDEX NAME)

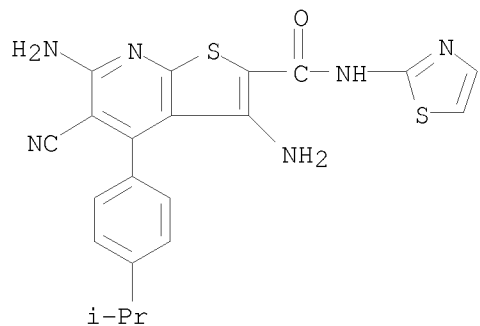


RN 342384-57-0 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N-(3-methoxyphenyl)-4-[4-(1-methylethyl)phenyl]- (CA INDEX NAME)

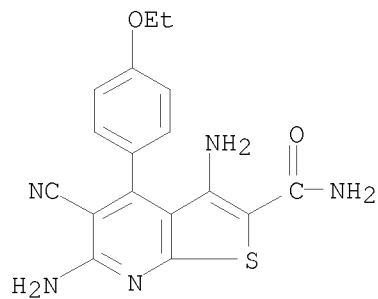


RN 361178-59-8 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-(1-methylethyl)phenyl]-N-2-thiazolyl- (CA INDEX NAME)

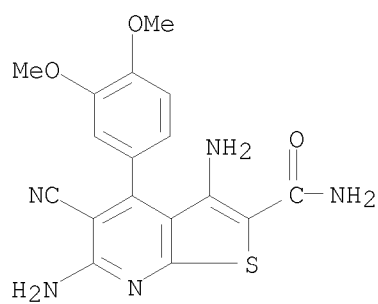
10/574,788



RN 361477-78-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(4-ethoxyphenyl)- (CA INDEX NAME)



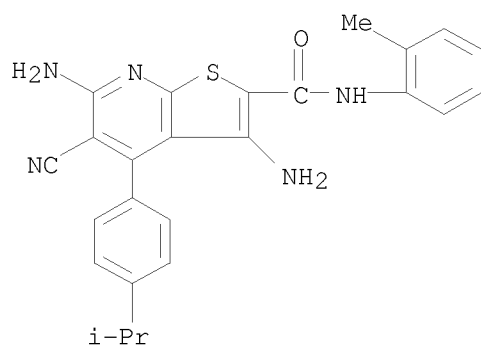
RN 361478-09-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)- (CA INDEX NAME)



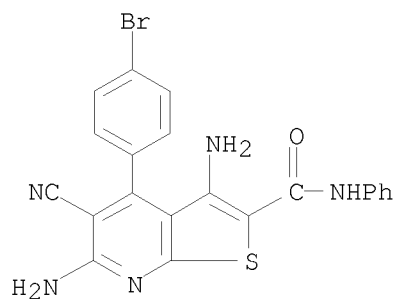
RN 369394-78-5 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-(1-methylethyl)phenyl]-N-(2-methylphenyl)- (CA  
INDEX NAME)



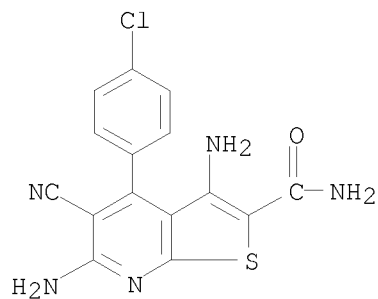
10/574,788



RN 369609-75-6 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(4-bromophenyl)-5-cyano-N-phenyl- (CA INDEX NAME)

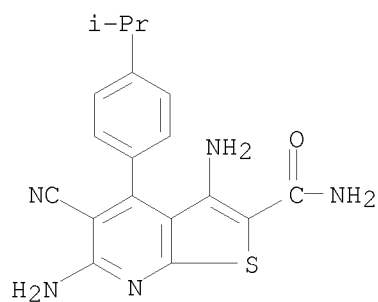


RN 383156-16-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(4-chlorophenyl)-5-cyano- (CA INDEX NAME)



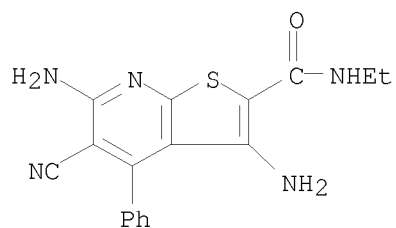
RN 476319-10-5 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-[4-(1-methylethyl)phenyl]- (CA INDEX NAME)

10/574,788



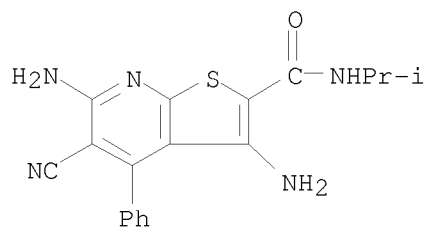
RN 850448-55-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N-ethyl-4-phenyl-  
(CA INDEX NAME)



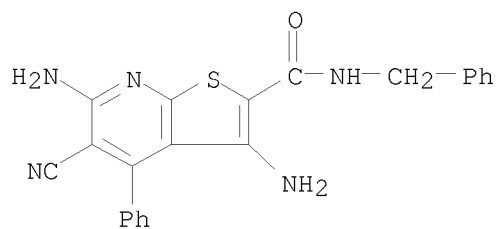
RN 850448-56-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N-(1-methylethyl)-4-phenyl- (CA INDEX NAME)



RN 850448-57-6 CAPLUS

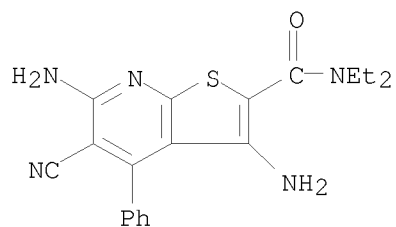
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)



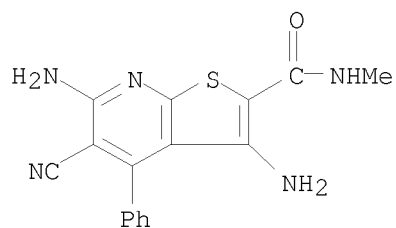
RN 850448-58-7 CAPLUS

10/574,788

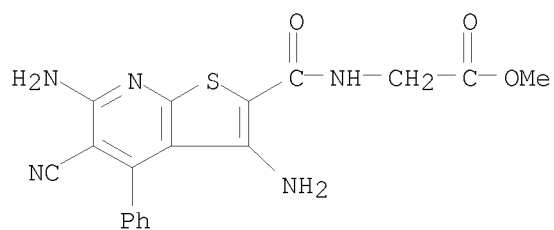
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N,N-diethyl-4-phenyl- (CA INDEX NAME)



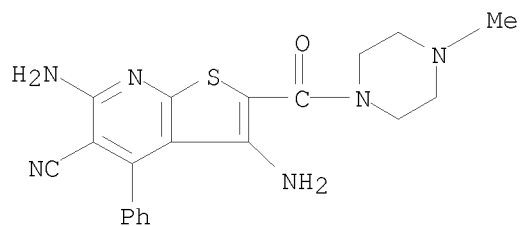
RN 850448-59-8 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N-methyl-4-phenyl- (CA INDEX NAME)



RN 850448-60-1 CAPLUS  
CN Glycine, N-[(3,6-diamino-5-cyano-4-phenylthieno[2,3-b]pyridin-2-yl)carbonyl]-, methyl ester (CA INDEX NAME)

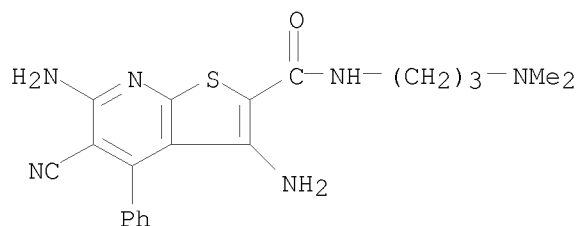


RN 850448-61-2 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-[(4-methyl-1-piperazinyl)carbonyl]-4-phenyl- (CA INDEX NAME)

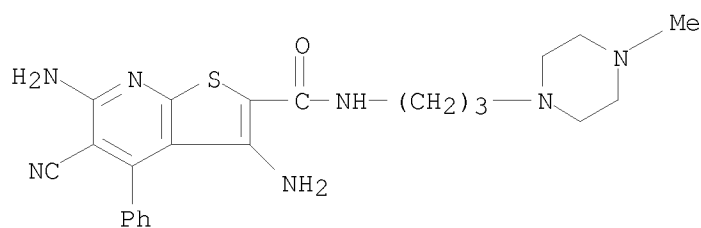


10/574,788

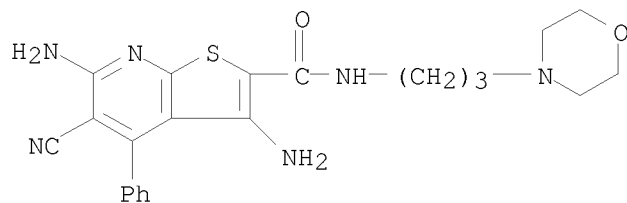
RN 850448-62-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N-[3-(dimethylamino)propyl]-4-phenyl- (CA INDEX NAME)



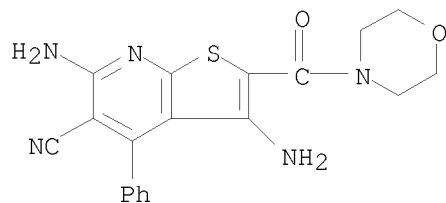
RN 850448-63-4 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N-[3-(4-methyl-1-piperazinyl)propyl]-4-phenyl- (CA  
INDEX NAME)



RN 850448-64-5 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N-[3-(4-morpholinyl)propyl]-4-phenyl- (CA INDEX NAME)



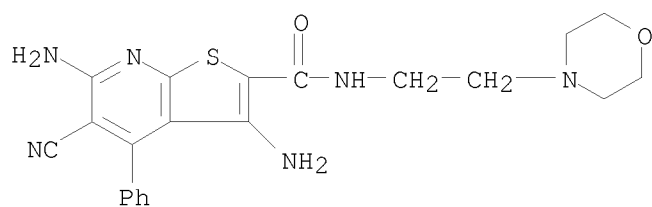
RN 850448-65-6 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(4-morpholinylcarbonyl)-4-phenyl- (CA INDEX NAME)



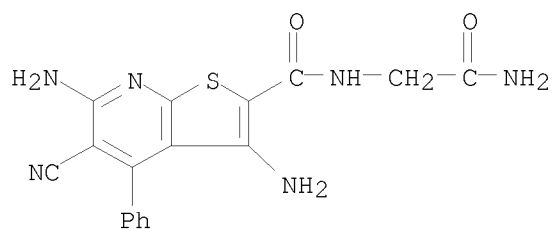
RN 850448-66-7 CAPLUS

10/574,788

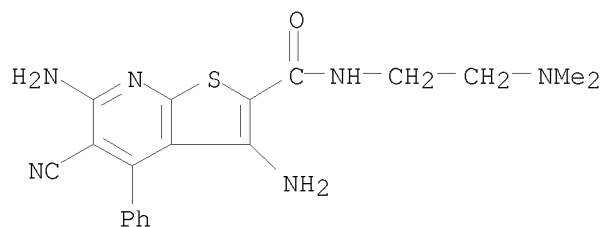
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N-[2-(4-morpholinyl)ethyl]-4-phenyl- (CA INDEX NAME)



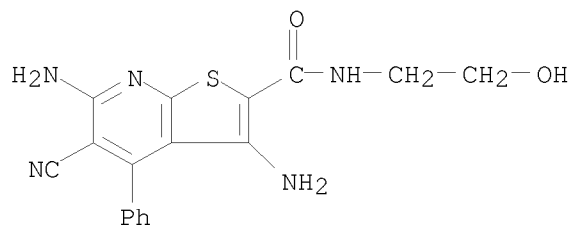
RN 850448-67-8 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-N-(2-amino-2-oxoethyl)-5-cyano-4-phenyl- (CA INDEX NAME)



RN 850448-68-9 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N-[2-(dimethylamino)ethyl]-4-phenyl- (CA INDEX NAME)



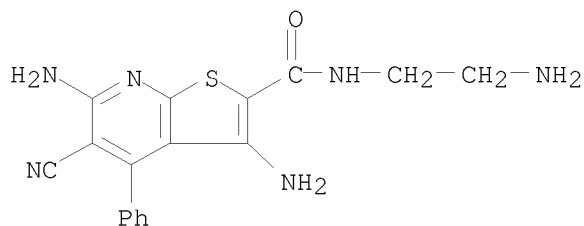
RN 850448-69-0 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-N-(2-hydroxyethyl)-4-phenyl- (CA INDEX NAME)



RN 850448-70-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,

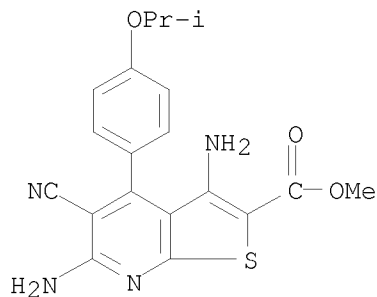
10/574,788

3,6-diamino-N-(2-aminoethyl)-5-cyano-4-phenyl- (CA INDEX NAME)



RN 850448-71-4 CAPLUS

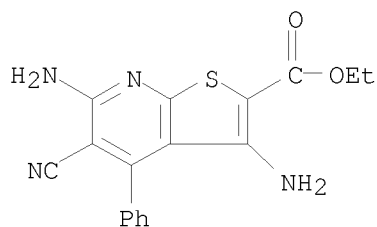
CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3,6-diamino-5-cyano-4-[4-(1-methylethoxy)phenyl]-, methyl ester (CA INDEX  
NAME)



IT 413606-58-3P, 3,6-Diamino-5-cyano-4-phenyl-thieno[2,3-b]pyridine-2-  
carboxylic acid ethyl ester 850448-72-5P,  
3,6-Diamino-5-cyano-4-phenyl-thieno[2,3-b]pyridine-2-carboxylic acid  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation of thienopyridines as HSP90 inhibitors)

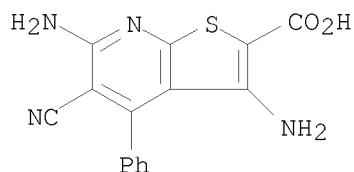
RN 413606-58-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-phenyl-,  
ethyl ester (CA INDEX NAME)



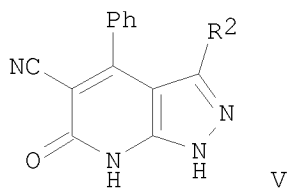
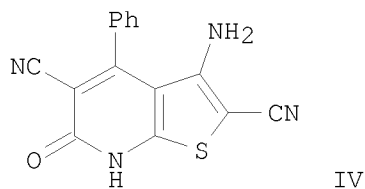
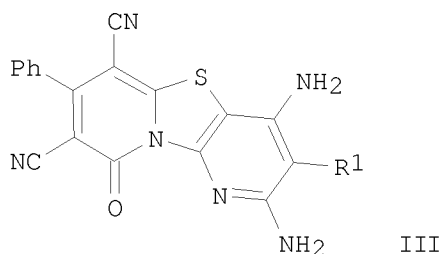
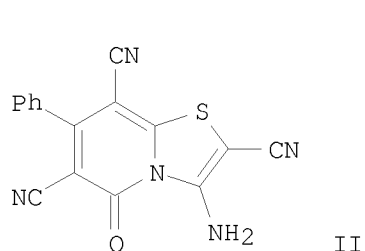
RN 850448-72-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-phenyl-  
(CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:1003588 CAPLUS  
 DOCUMENT NUMBER: 143:266879  
 TITLE: Pyridinethiones as precursors of thieno- and azolopyridines & pyridothieno-pyridoazoloazines  
 AUTHOR(S): Youssef, Ayman M. S.  
 CORPORATE SOURCE: Chemistry Department, Faculty of Science, Fayoum Branch, Cairo University, Egypt  
 SOURCE: Mansoura Science Bulletin, A: Chemistry (2004), 31(1), 49-65  
 CODEN: MSBCF4; ISSN: 1110-4562  
 PUBLISHER: Mansoura University  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 143:266879  
 GI



AB 2-Mercapto-6-oxo-4-phenyl-1,2-dihydropyridine-3,5-dicarbonitrile (I) was reacted with an equimolar amount of bromomalononitrile to form 3-amino-5-oxo-7-phenyl-5H-thiazolo[3,2-a]pyridine-2,6,8-tricarbonitrile II. Compound II was reacted with malononitrile and Et cyanoacetate to give thiazolo[3,2-a:4,5-b]dipyridines III (R1 = CN, EtO2C). Reaction of II with carbon disulfide gave 4-imino-9-oxo-7-phenyl-1,2,4,9-tetrahydro-2-thioxopyrido[2',1':2,3]thiazolo[4,5-d][1,3]thiazine-6,8-dicarbonitrile. Cycloalkylation of I upon heating with chloroacetonitrile afforded 3-amino-6-oxo-4-phenyl-6,7-dihydrothieno[2,3-b]pyridine-2,5-dicarbonitrile

IV, which was converted into functionalized pyrido[3',2':4,5]thieno[3,2-d]pyrimidines on treatment with formic acid or formamide. Ethylation of I with Et iodide gave the corresponding S-Et derivative, which on treatment with hydrazine hydrate gave pyrazolo[3,4-b]pyridine-5-carbonitrile V (R2 = H2N). The latter was diazotized and coupled with naphthols or quinoline to afford the corresponding arylazo derivs. V (R2 = 4-hydroxynaphth-1-ylazo, 2-hydroxynaphth-1-ylazo, 5-quinolinylazo).

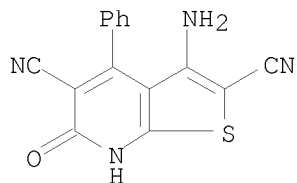
IT 141481-02-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of thienopyridines, pyridothienopyrimidines, pyrazolopyridines, pyridopyrazolopyrimidines and other polycyclic heterocycles from (dicyano)(mercapto)pyridone)

RN 141481-02-9 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile,  
3-amino-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)



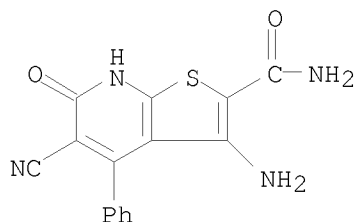
IT 863560-46-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of thienopyridines, pyridothienopyrimidines, pyrazolopyridines, pyridopyrazolopyrimidines and other polycyclic heterocycles from (dicyano)(mercapto)pyridone)

RN 863560-46-7 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3-amino-5-cyano-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:643807 CAPLUS

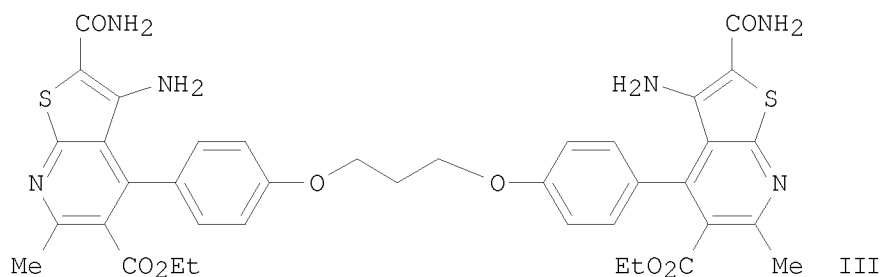
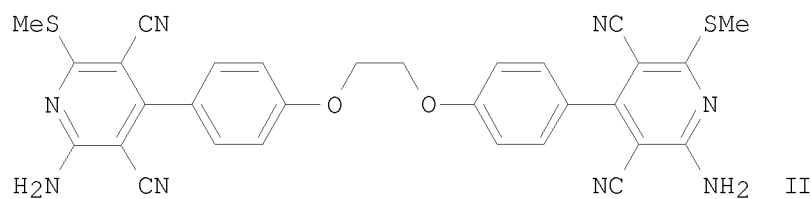
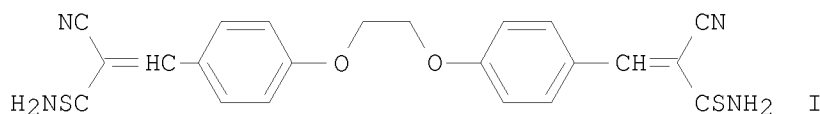
DOCUMENT NUMBER: 135:357861

TITLE: Versatile starting materials for novel  
1,ω-bis(pyridin-4-ylphenoxy)alkanes, and their  
corresponding bis(thieno[2,3-b]pyridin-4-ylphenoxy)  
derivatives

AUTHOR(S): Abbas, Ashraf A.; Elneairy, Mohamed A. A.; Mabkhot,  
Yehia N.



CORPORATE SOURCE: Chemistry Department, Faculty of Sciences, Cairo University, Giza, Egypt  
 SOURCE: Journal of Chemical Research, Synopses (2001), (4), 124-126, 0411-0427  
 CODEN: JRPSDC; ISSN: 0308-2342  
 PUBLISHER: Science Reviews Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 135:357861  
 GI



AB A synthesis is described, starting from p-hydroxybenzaldehyde, of some new bis(activated styrene) derivs., e.g. I, and their conversion into novel bis(pyridin-4-yl) ethers, e.g. II, and bis(thieno[2,3-b]pyridine) derivs., e.g. III.

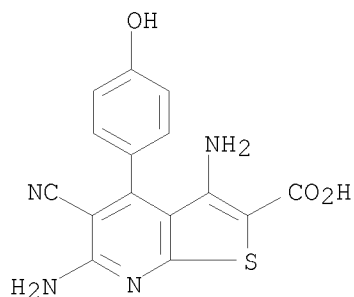
IT 372187-53-6P 372187-54-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of bis(pyridinylphenoxy)- and  
 bis(thienopyridinylphenoxy)alkanes)

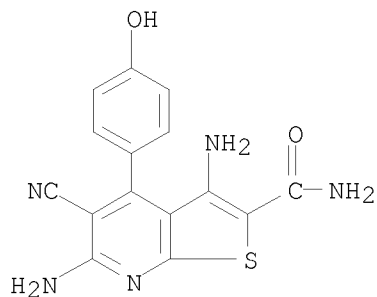
RN 372187-53-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
 3,6-diamino-5-cyano-4-(4-hydroxyphenyl)- (CA INDEX NAME)

10/574,788



RN 372187-54-7 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-5-cyano-4-(4-hydroxyphenyl)- (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:79511 CAPLUS

DOCUMENT NUMBER: 130:237502

TITLE: Synthesis and recyclization of  
4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans

AUTHOR(S): Dyachenko, V. D.; Litvinov, V. P.

CORPORATE SOURCE: Shevchenko Lugansk State Pedagogical Institute,  
Luhansk, Russia

SOURCE: Russian Journal of Organic Chemistry (Translation of  
Zhurnal Organicheskoi Khimii) (1998), 34(4), 557-563  
CODEN: RJOCEQ; ISSN: 1070-4280

PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 130:237502

AB Reaction of (arylmethylene)malononitriles with cyanothioacetamide or of  
arylmethylenecyanothioacetamides with malononitrile affords  
4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans which were further cyclized  
into 6-amino-4-aryl-3,5-dicyanopyridine-2(1H)-thiones. On the basis of  
the latter compds., substituted 2-alkylthiopyridines and  
thieno[2,3-b]pyridines were prepared 4-Hydroxybenzalcyanothioacetamide  
reacts with  $\alpha$ -bromo ketones by Hantzsch with the formation of  
thiazolyl-substituted acrylonitriles acylated with acetic anhydride at the  
OH group.

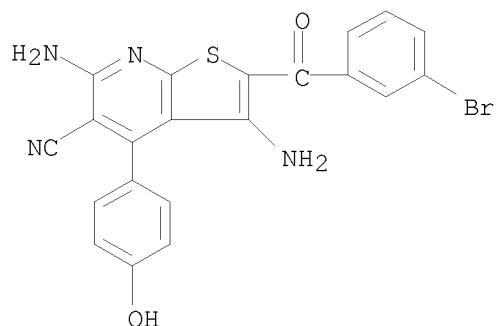
IT 221179-10-8P

10/574,788

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and cyclization of (aryl)diaminodicyanothiopyran derivs.)

RN 221179-10-8 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(3-bromobenzoyl)-4-(4-hydroxyphenyl)- (CA INDEX NAME)

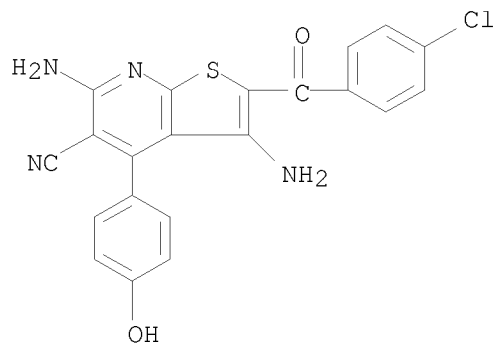


IT 221179-09-5P 221179-11-9P 221179-12-0P  
221179-13-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 221179-09-5 CAPLUS

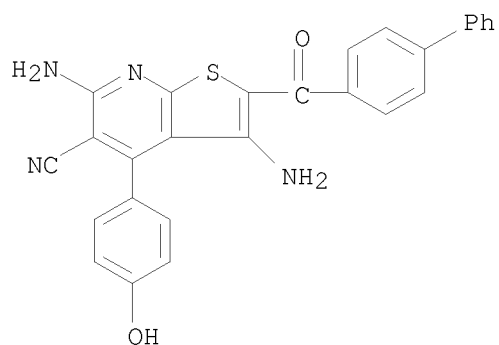
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(4-chlorobenzoyl)-4-(4-hydroxyphenyl)- (CA INDEX NAME)



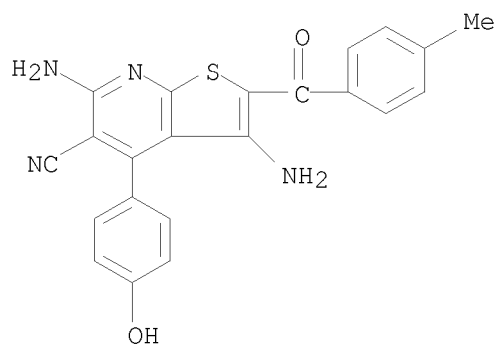
RN 221179-11-9 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-([1,1'-biphenyl]-4-ylcarbonyl)-4-(4-hydroxyphenyl)- (CA  
INDEX NAME)

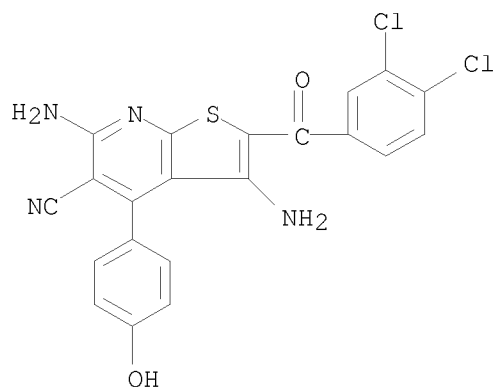
10/574,788



RN 221179-12-0 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-4-(4-hydroxyphenyl)-2-(4-methylbenzoyl)- (CA INDEX NAME)



RN 221179-13-1 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(3,4-dichlorobenzoyl)-4-(4-hydroxyphenyl)- (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1998:814730 CAPLUS

10/574,788

DOCUMENT NUMBER: 130:191419  
TITLE: Synthesis, antihistaminic and cytotoxic activity of pyridothieno- and pyridodithienotriazines  
AUTHOR(S): Quintela, Jose Maria; Peinador, Carlos; Veiga, Mari Carmen; Botana, Luis M.; Alfonso, Amparo; Riguera, Ricardo  
CORPORATE SOURCE: Departamento de Quimica Fundamental e Industrial, Facultad de Ciencias, Universidad de La Coruna, La Coruna, 15071, Spain  
SOURCE: European Journal of Medicinal Chemistry (1998), 33(11), 887-897  
CODEN: EJMCA5; ISSN: 0223-5234  
PUBLISHER: Editions Scientifiques et Medicales Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English

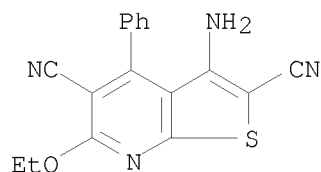
AB The synthesis of pyrido[3',2':4,5]thieno[3,2-d]-1,2,3-triazines and pyrido[3',2':4,5]dithieno[3,2-d]-1,2,3-triazines, and their inhibitory action on the release of histamine from rat mast cells under immunol. and chemical stimulus are presented. Some compds. are strong inhibitors under all the conditions tested while some are good inhibitor in all conditions except when it is preincubated with ovalbumin. Some compds. are good inhibitors in the immunol. expts. but are practically inactive under chemical stimulus. Some compds. show in vitro cytotoxic activity against several human and mouse tumoral cell lines with IC50 values well under 1 mg/mL.

IT 157332-06-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation and antihistaminic and cytotoxic structure activity relations of pyridothieno- and pyridodithienotriazines)

RN 157332-06-4 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3-amino-6-ethoxy-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:737279 CAPLUS

DOCUMENT NUMBER: 130:66466

TITLE: Synthesis and antiallergic activity of pyridothienopyrimidines

AUTHOR(S): Quintela, Jose M.; Peinador, Carlos; Veiga, Carmen; Gonzalez, Liliane; Botana, Luis M.; Alfonso, Amparo; Riguera, Ricardo

CORPORATE SOURCE: Departamento de Quimica Fundamental e Industrial, Facultad de Ciencias, Universidad de La Coruna, La Couruna, 15071, Spain

SOURCE: Bioorganic & Medicinal Chemistry (1998), 6(10), 1911-1925

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis of a series of pyridothienopyrimidines and their evaluation as inhibitors or inducers of the release of histamine from rat mast cells is reported. The activity was measured after immunol. stimulation with ovalbumin and chemical stimulation with polymer 48/80 and the drugs adriamycin and vinorelbine. The expts. were carried out with and without preincubation of the stimulus with the cells before addition of the drug. Several pyridothienopyrimidines show inhibitory IC<sub>50</sub> values in the range 2-25  $\mu$ M, indicating they are up to 100 times more potent than cromoglycate (DSCG) and 10 times greater than Ketotifen.

4-(4-Acetylphenyl)piperazino-7,9-diphenylpyrido[3',2':4,5]thieno[3,2-d]pyrimidine is a potent inhibitor in all the conditions tested and shows IC<sub>50</sub>=9-25 $\mu$ M. 2-Dimethylamino-4-piperazino-7,9-diphenylpyrido[3',2':4,5]thieno[3,2-d]pyrimidine is cytotoxic in vitro (IC<sub>50</sub> = 0.1-0.2 $\mu$ g/mL) against P-388, A-549, HT-29, and MEL-28 tumor cell lines.

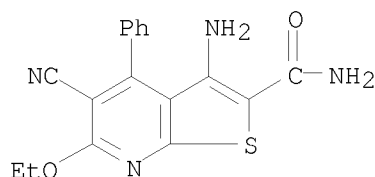
IT 146630-15-1 157332-06-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis and antiallergic activity of pyridothienopyrimidines)

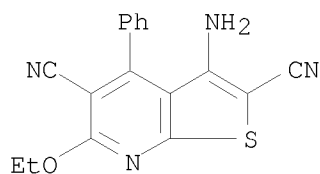
RN 146630-15-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3-amino-5-cyano-6-ethoxy-4-phenyl- (CA INDEX NAME)



RN 157332-06-4 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3-amino-6-ethoxy-4-phenyl- (CA INDEX NAME)



IT 217954-46-6P 217955-82-3P

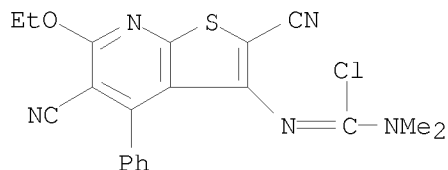
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and antiallergic activity of pyridothienopyrimidines)

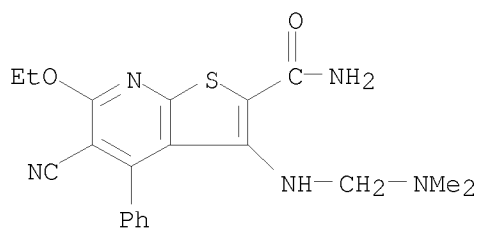
RN 217954-46-6 CAPLUS

CN Carbamimidic chloride, N'-(2,5-dicyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-3-yl)-N,N-dimethyl- (CA INDEX NAME)

10/574,788



RN 217955-82-3 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
5-cyano-3-[[ (dimethylamino)methyl]amino]-6-ethoxy-4-phenyl- (CA INDEX  
NAME)



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:617964 CAPLUS

DOCUMENT NUMBER: 129:275822

ORIGINAL REFERENCE NO.: 129:56241a,56244a

TITLE: Michael reaction in synthesis of  
6-amino-4-(4-butoxyphenyl)-3,5-dicyanopyridine-2(1H)-  
thione

AUTHOR(S): Dyachenko, V. D.; Litvinov, V. P.

CORPORATE SOURCE: T. G. Shevchenko Lugansk State Pedagogical Institute,  
Luhansk, 348011, Ukraine

SOURCE: Chemistry of Heterocyclic Compounds (New  
York) (Translation of Khimiya Geterotsiklicheskikh  
Soedinenii) (1998), 34(2), 188-194

CODEN: CHCCAL; ISSN: 0009-3122

PUBLISHER: Consultants Bureau

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 129:275822

AB The reaction of 4-butoxybenzalcyanoacetic ester with cyanothioacetamide  
yielded 6-amino-4-(4-butoxyphenyl)-3,5-dicyanopyridine-2(1H)-thione, also  
synthesized by recyclization of 2,6-diamino-4-(4-butoxyphenyl)-3,5-dicyano-  
4H-thiopyran and condensation of 4-butyloxybenzaldehyde with a 2-fold  
excess of cyanothioacetamide. Substituted 2-alkylthiopyridines and  
thieno[2,3-b]pyridines were obtained with the indicated pyridinethione.

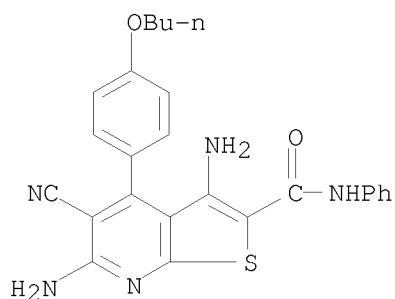
IT 214046-23-8P 214046-24-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 214046-23-8 CAPLUS

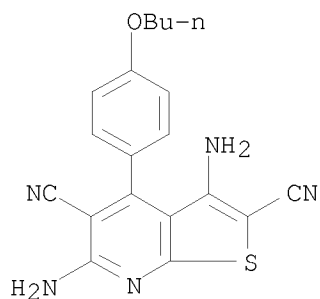
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(4-butoxyphenyl)-5-cyano-N-phenyl- (CA INDEX NAME)

10/574,788



RN 214046-24-9 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3,6-diamino-4-(4-butoxyphenyl)-  
(CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:310476 CAPLUS

DOCUMENT NUMBER: 129:41055

ORIGINAL REFERENCE NO.: 129:8635a,8638a

TITLE: New route to 6-amino-4-aryl-3,5-dicyanopyridine-2(1H)-  
thiones

AUTHOR(S): Dyachenko, V. D.; Krivokolysko, S. G.; Sharanin, Yu.  
A.; Litvinov, V. P.

CORPORATE SOURCE: Zelinskii Institute of Organic Chemistry, Russian  
Academy of Sciences, Moscow, 117913, Russia

SOURCE: Russian Journal of Organic Chemistry (Translation of  
Zhurnal Organicheskoi Khimii) (1997), 33(7), 1014-1017  
CODEN: RJOCEQ; ISSN: 1070-4280

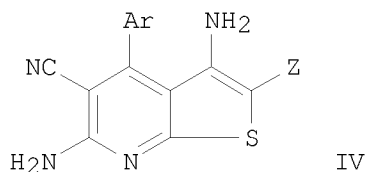
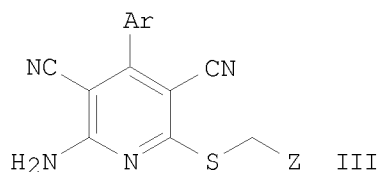
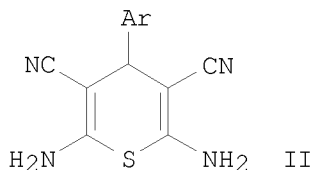
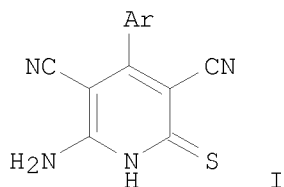
PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

GI





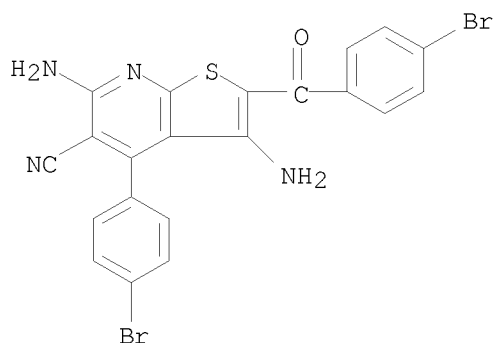
AB Condensation of ArCHO [Ar = 3-FC<sub>6</sub>H<sub>4</sub>, 2,4-(EtO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, 4-BrC<sub>6</sub>H<sub>4</sub>, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 3-FC<sub>6</sub>H<sub>4</sub>] with a twofold amount of N.tplbond.CCH<sub>2</sub>C(:S)NH<sub>2</sub> gave the 4-aryldicyanopyridinethiones I. These compds. are also formed by recyclization of 2,6-diamino-4-aryl-3,5-dicyano-4H-thiopyrans II. The cyanopyridinethiones I were used to prepare substituted 2-(alkylthio)pyridines III (Z = 4-BrC<sub>6</sub>H<sub>4</sub>CO, cyano, CO<sub>2</sub>ME, etc.) and thieno[2,3-b]pyridines IV (Z = 4-BrC<sub>6</sub>H<sub>4</sub>, 4-ClC<sub>6</sub>H<sub>4</sub>, CONH<sub>2</sub>).

IT 208254-38-0P 208254-39-1P 208254-40-4P

RL: PNU (Preparation, unclassified); PREP (Preparation)  
(preparation of aminoaryldicyanopyridinethiones)

RN 208254-38-0 CAPLUS

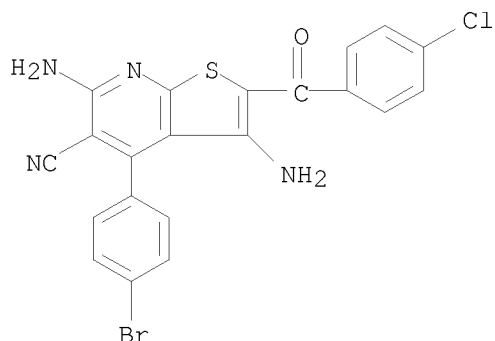
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(4-bromobenzoyl)-4-(4-bromophenyl)- (CA INDEX NAME)



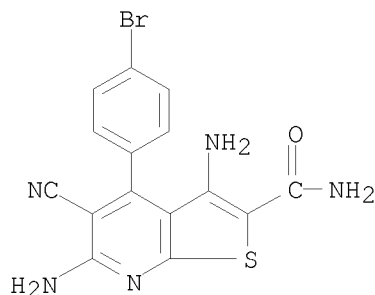
RN 208254-39-1 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-4-(4-bromophenyl)-2-(4-chlorobenzoyl)- (CA INDEX NAME)

10/574,788



RN 208254-40-4 CAPLUS  
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3,6-diamino-4-(4-bromophenyl)-5-cyano- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:41363 CAPLUS

DOCUMENT NUMBER: 128:140584

ORIGINAL REFERENCE NO.: 128:27655a,27658a

TITLE: New method for the synthesis of  
6-amino-4-aryl-3,5-dicyano-3,4-dihydropyridine-2(1H)-  
thiones by recyclization of  
4-aryl-2,6-diamino-4H-thiopyrans

AUTHOR(S): Dyachenko, V. D.; Krivokolysko, S. G.; Sharanin, Yu.  
A.; Litvinov, V. P.

CORPORATE SOURCE: T. G. Shevchenko Lugansk State Pedagogical Institute,  
Luhansk, 348011, Ukraine

SOURCE: Chemistry of Heterocyclic Compounds (New  
York)(Translation of Khimiya Geterotsiklicheskikh  
Soedinenii) (1998), Volume Date 1997, 33(7), 793-798  
CODEN: CHCCAL; ISSN: 0009-3122

PUBLISHER: Consultants Bureau

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Ammonium 6-amino-4-aryl-3,5-dicyano-1,4-dihydropyridine-2-thiolates were  
synthesized via recyclization of 4-aryl-2,6-diamino-3,5-dicyano-4H-  
thiopyrans in the presence of organic bases. On acidification of the  
products, the corresponding substituted 3,4-dihydro-2(1H)-pyridinethiones  
were obtained and used in the synthesis of

10/574,788

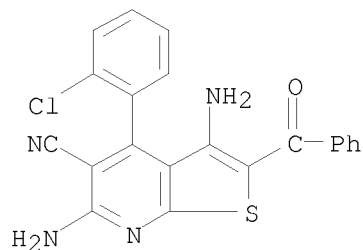
2-alkylthio-1,4-dihydropyridines, bis(2-pyridinyl)disulfides and thieno[2,3-b]pyridines.

IT 202405-75-2P 202405-76-3P 202405-77-4P  
202405-78-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and reactions of amino(thioxo)pyridinedicarbonitriles)

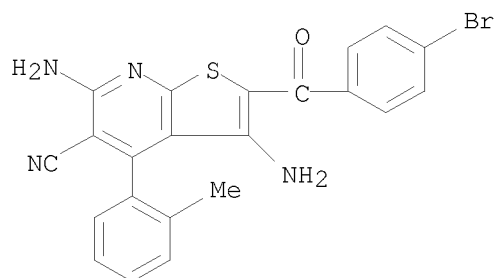
RN 202405-75-2 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-benzoyl-4-(2-chlorophenyl)- (CA INDEX NAME)



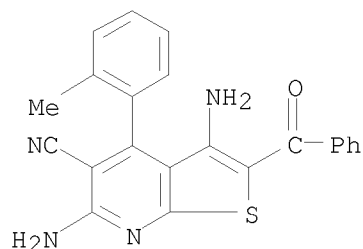
RN 202405-76-3 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(4-bromobenzoyl)-4-(2-methylphenyl)- (CA INDEX NAME)



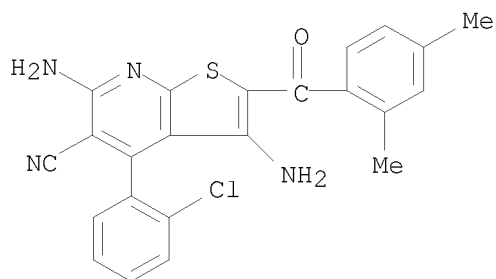
RN 202405-77-4 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-benzoyl-4-(2-methylphenyl)- (CA INDEX NAME)



RN 202405-78-5 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-4-(2-chlorophenyl)-2-(2,4-dimethylbenzoyl)- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:295302 CAPLUS

DOCUMENT NUMBER: 126:305519

ORIGINAL REFERENCE NO.: 126:59179a, 59182a

TITLE: Esters and nitriles of 3-phenylacrylic and 3-(2-furyl)acrylic acid in synthesis of 6-amino-3,5-dicyano-4-phenyl(or 2-furyl)pyridine-2(1H)-thiones and -selenones

AUTHOR(S): Krivokolyko, S. G.; Dyachenko, V. D.

CORPORATE SOURCE: Vostochno Ukr. Univ., Luhansk, Ukraine

SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition) (1996), 62(11-12), 61-66

CODEN: UKZHAU; ISSN: 0041-6045

PUBLISHER: Institut Obshchei i Neorganicheskoi Khimii NAN Ukrainy

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 126:305519

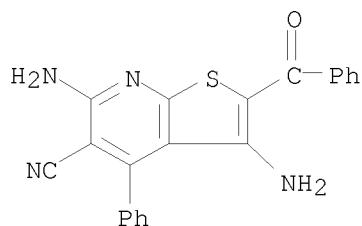
AB Reaction of esters and nitriles of 3-phenyl- and 3-(2-furyl)acrylic acid with cyanothio(seleno)acetamide leads to substituted 6-amino-3,5-dicyano-4-phenyl(2-furyl)pyridine-2(1H)-thiones and -selenones stabilized as the N-methylmorpholinium salts of 6-amino-3,5-dicyano-4-phenyl(2-furyl)pyridine-2(1H)-thiols and -selenols. These are converted to 2-(alkylthio)pyridines and thieno[2,3-b]pyridines.

IT 189278-44-2P 189278-46-4P 189278-50-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 189278-44-2 CAPLUS

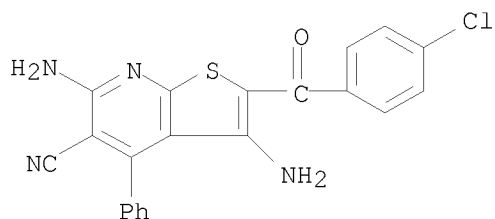
CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-benzoyl-4-phenyl- (CA INDEX NAME)



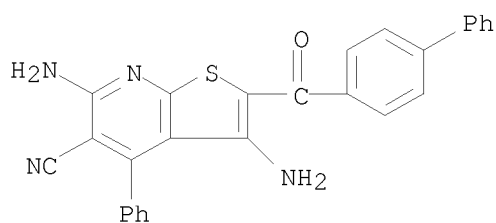
RN 189278-46-4 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-(4-chlorobenzoyl)-4-phenyl- (CA INDEX NAME)

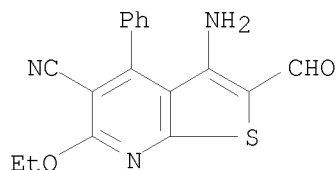
10/574,788



RN 189278-50-0 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-([1,1'-biphenyl]-4-ylcarbonyl)-4-phenyl- (CA INDEX NAME)



L7 ANSWER 23 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1996:86526 CAPLUS  
DOCUMENT NUMBER: 124:232284  
ORIGINAL REFERENCE NO.: 124:43031a,43034a  
TITLE: A synthesis for some new  
thieno[2,3-b:4,5-b]dipyridines  
AUTHOR(S): Veiga, Maria Carmen; Quintela, Jose Maria; Peinador,  
Carlos  
CORPORATE SOURCE: Faculty Ciencias, Univ. La Coruna, La Coruna, 15071,  
Spain  
SOURCE: Heterocycles (1996), 43(1), 91-100  
CODEN: HTCYAM; ISSN: 0385-5414  
PUBLISHER: Japan Institute of Heterocyclic Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 124:232284  
AB An efficient method is proposed for the preparation of substituted  
thieno[2,3-b:4,5-b]dipyridines based on the Friedlaender synthesis of  
3-amino-5-cyano-7-ethoxy-2-formyl-4-phenylthieno[2,3-b]pyridine (1) with  
acyclic, cyclic, heterocyclic and  $\alpha,\beta$ -unsatd. ketones. In  
addition, the reaction of 1 with guanidine sulfate yielded the fused  
triheterocyclic pyrido[3',2':4,5]-thieno[3,2-d]pyrimidine system.  
IT 157332-07-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(Friedlaender cyclization with ketones)  
RN 157332-07-5 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-6-ethoxy-2-formyl-4-phenyl-  
(CA INDEX NAME)



L7 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1995:357584 CAPLUS  
 DOCUMENT NUMBER: 122:214037  
 ORIGINAL REFERENCE NO.: 122:39127a, 39130a  
 TITLE: Substituted 3-aminothieno[2,3-b]pyridine-2-carboxamide  
 as a synthon for polyheterocyclic compounds.  
 Preparation of new pyridothieno-1,2,3-triazines and  
 related derivatives  
 AUTHOR(S): Peinador, Carlos; Veiga, M. Carman; Ojea, Vicente;  
 Quintela, Jose M.  
 CORPORATE SOURCE: Fac. Cienc., Univ. La Coruna, La Coruna, E-15071,  
 Spain  
 SOURCE: Heterocycles (1995), 41(1), 37-46  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PUBLISHER: Japan Institute of Heterocyclic Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

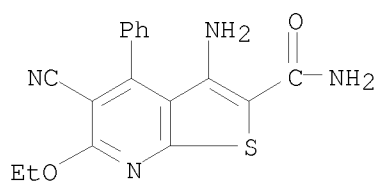
AB Pyrido[3',2':4,5]thieno[3,2-d]-1,2,3-triazines I (R = H, Me, CH<sub>2</sub>COPh, CH<sub>2</sub>CN) were synthesized from 3-aminothieno[2,3-b]pyridine by diazotization and subsequent treatment with electrophilic reagents. Reaction of triazinone I (R = H) with phosphorus oxychloride lead to a mixture of the triheterocyclic compound II and the 4-chloro substituted triazine. Aminolysis of II with either hydrazine or primary and secondary amines yielded thienopyridines, e.g. III. Nitrosation of III afforded the 4-substituted triazinone IV.

IT 146630-15-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (substituted aminothienopyridinecarboxamide as a synthon for  
 polyheterocyclic compds., preparation of new pyridothienotriazines and  
 related derivs.)

RN 146630-15-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3-amino-5-cyano-6-ethoxy-4-phenyl-  
 (CA INDEX NAME)



10/574,788

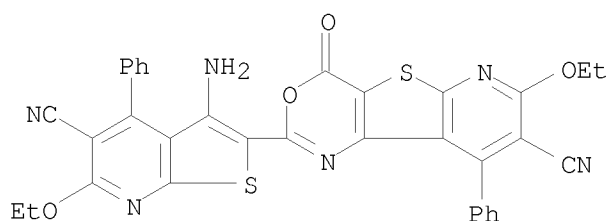
IT 161893-31-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(substituted aminothienopyridinecarboxamide as a synthon for polyheterocyclic compds., preparation of new pyridothienotriazines and related derivs.)

RN 161893-31-8 CAPLUS

CN 4H-Pyrido[3',2':4,5]thieno[3,2-d][1,3]oxazine-8-carbonitrile, 2-(3-amino-5-cyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-2-yl)-7-ethoxy-4-oxo-9-phenyl- (CA INDEX NAME)



IT 161893-33-0P 161893-34-1P 161893-35-2P

161893-38-5P 161893-39-6P 161893-40-9P

161893-41-0P 161893-42-1P 161893-43-2P

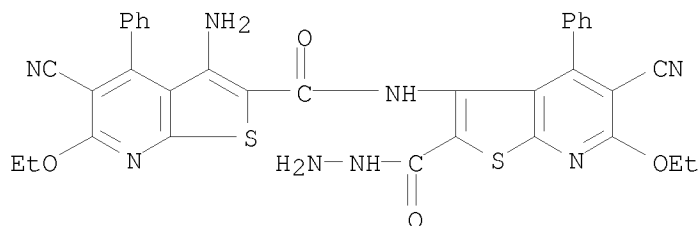
161893-44-3P 161893-45-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(substituted aminothienopyridinecarboxamide as a synthon for polyheterocyclic compds., preparation of new pyridothienotriazines and related derivs.)

RN 161893-33-0 CAPLUS

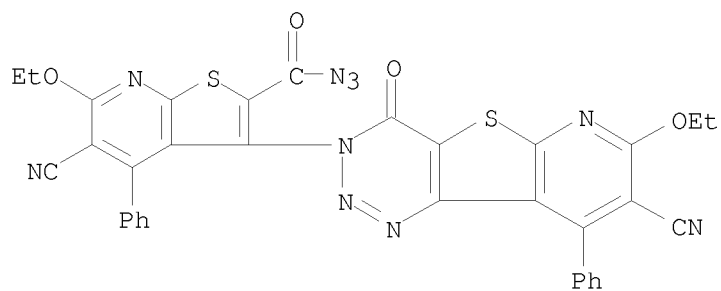
CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3-[[ (3-amino-5-cyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-2-yl)carbonyl]amino]-5-cyano-6-ethoxy-4-phenyl-, hydrazide (CA INDEX NAME)



RN 161893-34-1 CAPLUS

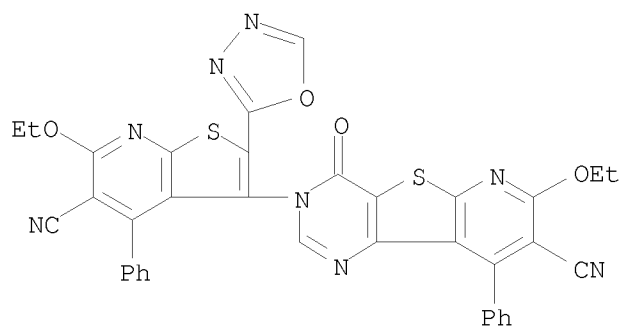
CN Thieno[2,3-b]pyridine-2-carbonyl azide, 5-cyano-3-(8-cyano-7-ethoxy-4-oxo-9-phenylpyrido[3',2':4,5]thieno[3,2-d]-1,2,3-triazin-3(4H)-yl)-6-ethoxy-4-phenyl- (CA INDEX NAME)

10/574,788



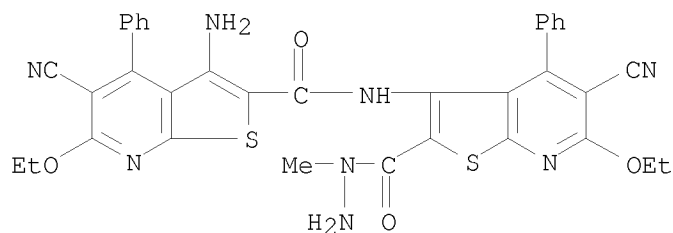
RN 161893-35-2 CAPLUS

CN Pyrido[3',2':4,5]thieno[3,2-d]pyrimidine-8-carbonitrile,  
3-[5-cyano-6-ethoxy-2-(1,3,4-oxadiazol-2-yl)-4-phenylthieno[2,3-b]pyridin-  
3-yl]-7-ethoxy-3,4-dihydro-4-oxo-9-phenyl- (CA INDEX NAME)



RN 161893-38-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3-[[[(3-amino-5-cyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-2-  
yl)carbonyl]amino]-5-cyano-6-ethoxy-4-phenyl-, 1-methylhydrazide (CA  
INDEX NAME)

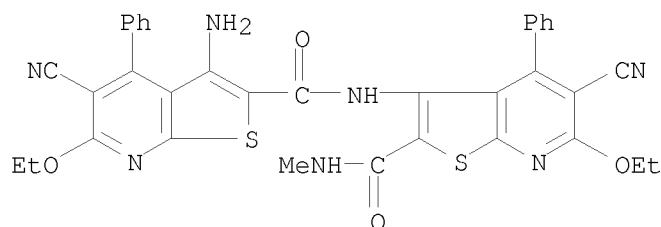


RN 161893-39-6 CAPLUS

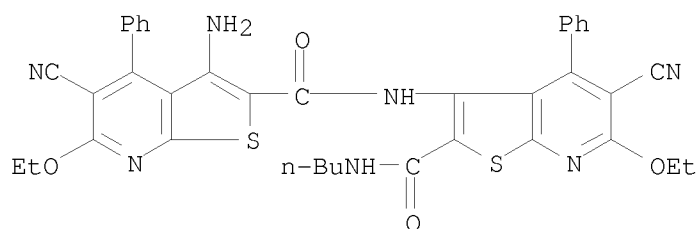
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3-amino-5-cyano-N-[5-cyano-6-ethoxy-2-[(methylamino)carbonyl]-4-  
phenylthieno[2,3-b]pyridin-3-yl]-6-ethoxy-4-phenyl- (CA INDEX NAME)



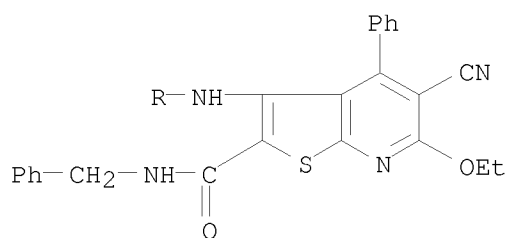
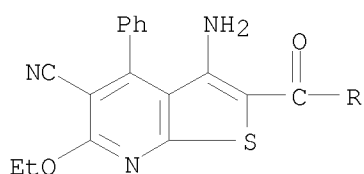
10/574,788



RN 161893-40-9 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3-amino-N-[2-[(butylamino)carbonyl]-5-cyano-6-ethoxy-4-phenylthieno[2,3-  
 b]pyridin-3-yl]-5-cyano-6-ethoxy-4-phenyl- (CA INDEX NAME)

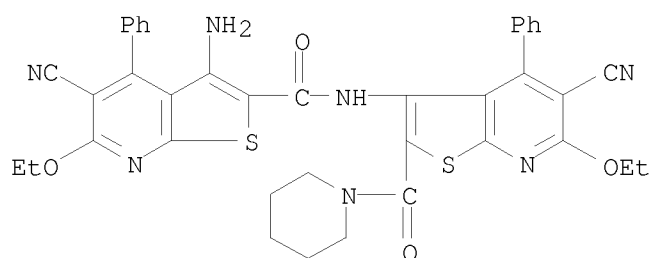


RN 161893-41-0 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3-amino-5-cyano-N-[5-cyano-6-ethoxy-4-phenyl-2-  
 [(phenylmethyl)amino]carbonyl]thieno[2,3-b]pyridin-3-yl]-6-ethoxy-4-  
 phenyl- (CA INDEX NAME)



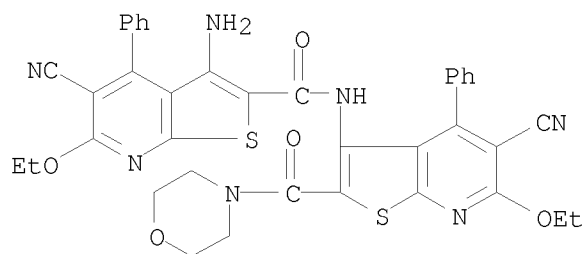
RN 161893-42-1 CAPLUS  
 CN Thieno[2,3-b]pyridine-2-carboxamide,  
 3-amino-5-cyano-N-[5-cyano-6-ethoxy-4-phenyl-2-(1-  
 piperidinylcarbonyl)thieno[2,3-b]pyridin-3-yl]-6-ethoxy-4-phenyl- (CA  
 INDEX NAME)

10/574,788



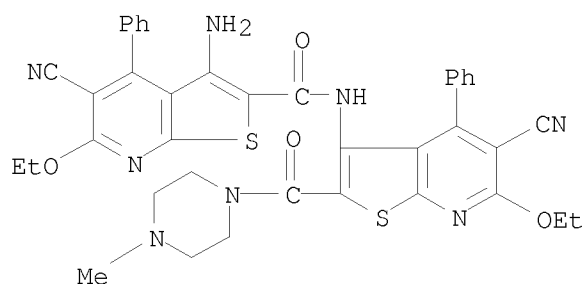
RN 161893-43-2 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3-amino-5-cyano-N-[5-cyano-6-ethoxy-2-(4-morpholinylcarbonyl)-4-phenylthieno[2,3-b]pyridin-3-yl]-6-ethoxy-4-phenyl- (CA INDEX NAME)



RN 161893-44-3 CAPLUS

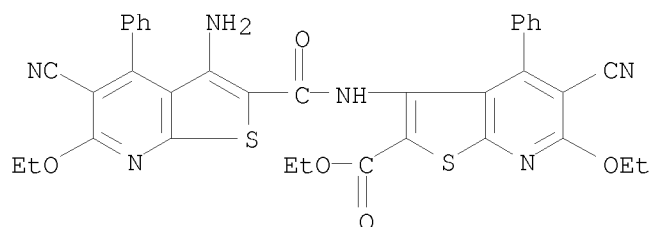
CN Thieno[2,3-b]pyridine-2-carboxamide,  
3-amino-5-cyano-N-[5-cyano-6-ethoxy-2-[(4-methyl-1-piperazinyl)carbonyl]-4-phenylthieno[2,3-b]pyridin-3-yl]-6-ethoxy-4-phenyl- (CA INDEX NAME)



RN 161893-45-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3-[[[(3-amino-5-cyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-2-yl)carbonyl]amino]-5-cyano-6-ethoxy-4-phenyl-, ethyl ester (CA INDEX NAME)

10/574,788



L7 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:327947 CAPLUS

DOCUMENT NUMBER: 122:187341

ORIGINAL REFERENCE NO.: 122:34315a,34318a

TITLE: Nitrile cyclization reactions. LIV. Synthesis and properties of 6-amino-4-aryl-3,5-dicyanopyridin-2(1H)-ones, -thiones, -ylidenemalononitriles and their hydrogenated analogs

AUTHOR(S): Sharanin, Yu. A.; Krivokolysko, S. G.; Dyachenko, V. D.

CORPORATE SOURCE: Vostochnoukr. Univ., Luhansk, Ukraine

SOURCE: Zhurnal Organicheskoi Khimii (1994), 30(4), 581-7

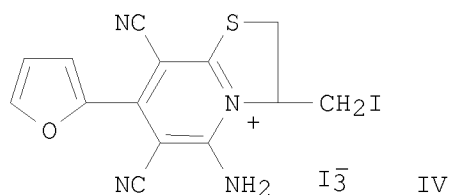
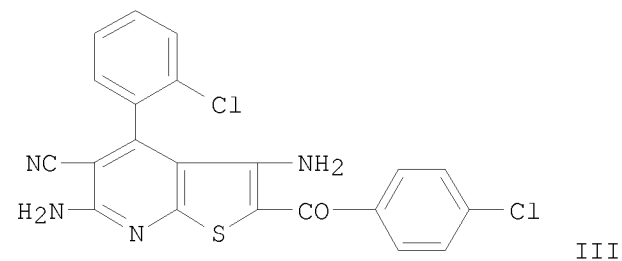
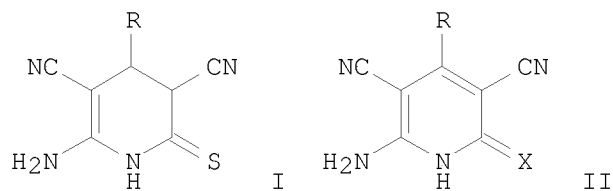
CODEN: ZORKAE; ISSN: 0514-7492

PUBLISHER: Nauka

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI



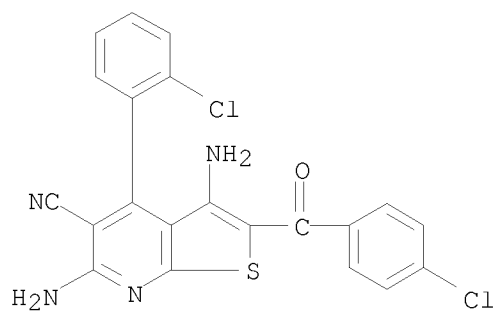
AB RCH:C(CN)CSNH<sub>2</sub> (R = aryl, heteroaryl) reacted with NCCH<sub>2</sub>C(X)NH<sub>2</sub> [X = O, S, C(CN)<sub>2</sub>] to give, after acidification, products such as I and II. Also obtained were thienopyridines, e.g., III, and thiazolopyridinium triiodide IV.

IT 161689-62-9P 161689-65-2P 161689-66-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

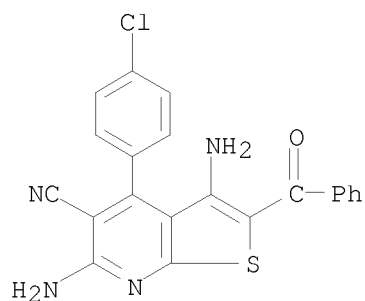
RN 161689-62-9 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(4-chlorobenzoyl)-4-(2-chlorophenyl)- (CA INDEX NAME)



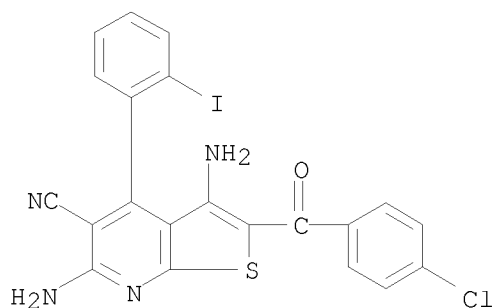
RN 161689-65-2 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-benzoyl-4-(4-chlorophenyl)- (CA INDEX NAME)



RN 161689-66-3 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3,6-diamino-2-(4-chlorobenzoyl)-4-(2-iodophenyl)- (CA INDEX NAME)



L7 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:94186 CAPLUS

DOCUMENT NUMBER: 122:31452

ORIGINAL REFERENCE NO.: 122:6207a,6210a

TITLE: A ready entry to substituted derivatives of  
pyrido[3'',2'':4',5']thieno[2',3':5,6]pyrido[2,3-  
d]pyrimidines, a new tetraheterocyclic ring system  
AUTHOR(S): Peinador, Carlos; Veiga, M. Carmen; Ojea, Vicente;  
Quintela, Jose M.

CORPORATE SOURCE: Fac. Ciencias, Univ. La Coruna, La Coruna, E-15071,  
Spain

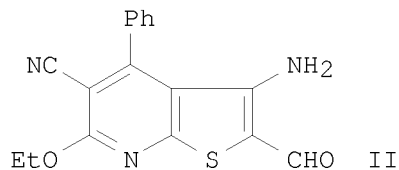
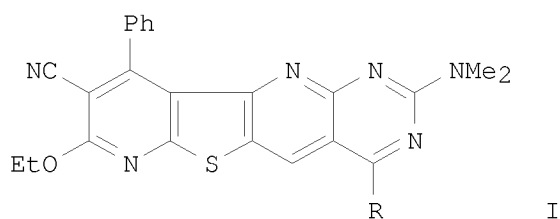
SOURCE: Heterocycles (1994), 38(9), 2065-72  
CODEN: HTCYAM; ISSN: 0385-5414

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 122:31452

GI



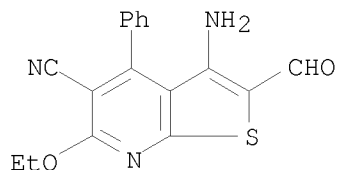
AB Several 4-substituted pyrido[3'',2'':4',5']thieno[2',3':5,6]pyrido[2,3-  
d]pyrimidines [I; R = morpholino, piperidino, 4-benzylpiperazino, etc.]  
were prepared by reaction of the chloro derivative I [R = Cl] (preparation  
from the  
thienopyridinecarboxaldehyde derivative II with malononitrile and Cl2N+Me2Cl-  
given) with nucleophilic agents.

IT 157332-07-5

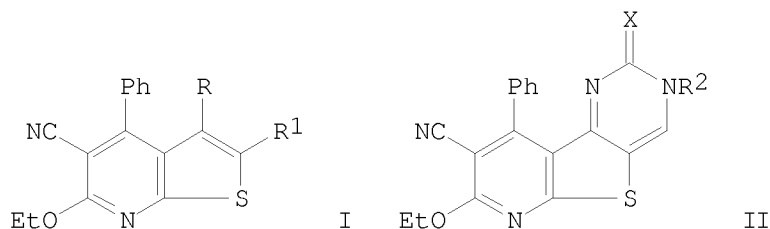
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction with malononitrile)

10/574,788

RN 157332-07-5 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-6-ethoxy-2-formyl-4-phenyl-  
(CA INDEX NAME)



L7 ANSWER 27 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1994:557594 CAPLUS  
DOCUMENT NUMBER: 121:157594  
ORIGINAL REFERENCE NO.: 121:28533a,28536a  
TITLE: An efficient iminophosphorane-mediated synthesis for  
pyrido[3',2':4,5]thieno[3,2-d]pyrimidine derivatives  
AUTHOR(S): Peinador, Carlos; Moreira, Maria J.; Quintela, Jose M.  
CORPORATE SOURCE: Dep. Quim. Fundam. Ind., Fac. Cienc., La Coruna,  
E-15071, Spain  
SOURCE: Tetrahedron (1994), 50(22), 6705-14  
CODEN: TETRAB; ISSN: 0040-4020  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 121:157594  
GI

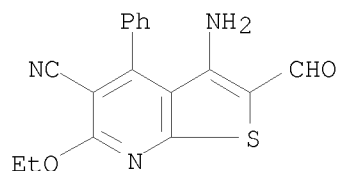


AB A ready one-pot preparation for pyrido[3',2':4,5]thieno[3,2-d]pyrimidines bearing various substituents at position 2 of the pyrimidine ring is reported. The azo Wittig-type reaction of iminophosphoranes derived from the aldehyde I (R = NH2, R1 = CHO) with heterocumulenes leads to functionalized fused pyrimidines. Iminophosphoranes, 2-[(N-arylamino)methyl-3-(triphenylphosphoranylidene)amino]thieno[2,3-b]pyridines, I (R = N:PPh3, R1 = CH:NPh, CH:NC6H4Me-4, CH:NC6H4OMe-4) react with isocyanates, carbon dioxide and carbon disulfide under mild conditions to give the functionalized 2,3-dihydropyrido[3',2':4,5]thieno[3,2-d]pyrimidines II [X = NR3, R2 = Ph, 4-MeC6H4, 4-MeOC6H4, R3 = Et, 4-ClC6H4, 4-FC6H4, 4-MeC6H4], and II (R2 = same, X = O, S) resp.

IT 157332-07-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, with aromatic amines)  
RN 157332-07-5 CAPLUS

10/574,788

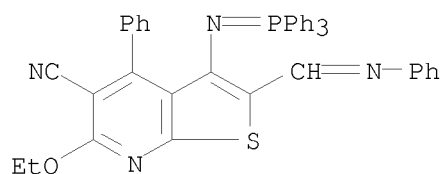
CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-6-ethoxy-2-formyl-4-phenyl-  
(CA INDEX NAME)



IT 157332-09-7P 157332-15-5P 157332-16-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, with heterocumulenes)

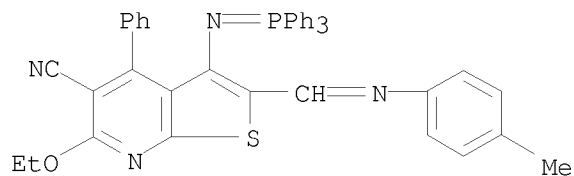
RN 157332-09-7 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
6-ethoxy-4-phenyl-2-[(phenylimino)methyl]-3-  
[(triphenylphosphoranylidene)amino]- (CA INDEX NAME)



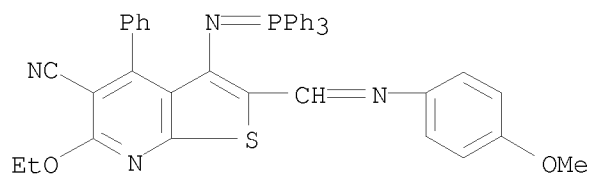
RN 157332-15-5 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
6-ethoxy-2-[[4-methylphenyl]imino]methyl]-4-phenyl-3-  
[(triphenylphosphoranylidene)amino]- (CA INDEX NAME)



RN 157332-16-6 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
6-ethoxy-2-[[4-methoxyphenyl]imino]methyl]-4-phenyl-3-  
[(triphenylphosphoranylidene)amino]- (CA INDEX NAME)



IT 157332-08-6P 157332-13-3P 157332-14-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

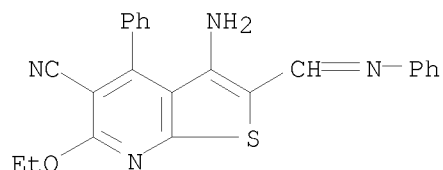
10/574,788

(Reactant or reagent)

(preparation and reaction of, with triphenylphosphine, iminophosphorane by)

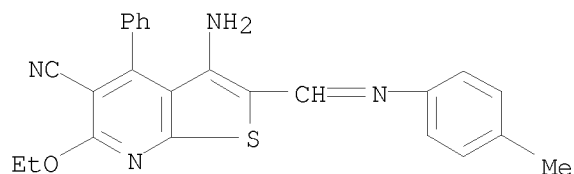
RN 157332-08-6 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3-amino-6-ethoxy-4-phenyl-2-[(phenylimino)methyl]- (CA INDEX NAME)



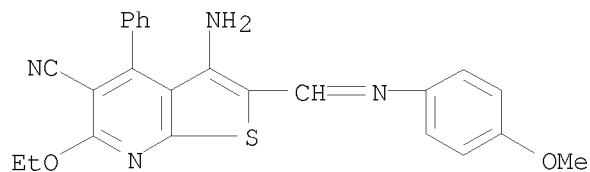
RN 157332-13-3 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3-amino-6-ethoxy-2-[[ (4-methylphenyl)imino]methyl]-4-phenyl- (CA INDEX NAME)



RN 157332-14-4 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3-amino-6-ethoxy-2-[[ (4-methoxyphenyl)imino]methyl]-4-phenyl- (CA INDEX NAME)

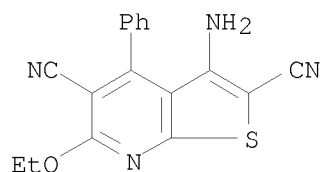


IT 157332-06-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reduction of)

RN 157332-06-4 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3-amino-6-ethoxy-4-phenyl- (CA INDEX NAME)





L7 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:533999 CAPLUS

DOCUMENT NUMBER: 121:133999

ORIGINAL REFERENCE NO.: 121:24225a,24228a

TITLE: A synthesis of heterocyclic ring systems.  
 Pyrido[3',2':4,5]thieno[2,3-b]pyrrolizine and  
 pyrido[6',5':4,5][3',2':4,5]dithieno[2,3:b':2,3-  
 b]dipyrrolizine

AUTHOR(S): Peinador, Carlos; Veiga, M. Carmen; Vilar, Juan;  
 Quintela, Jose M.

CORPORATE SOURCE: Fac. Ciencias, Univ. de La Coruna, La Coruna, E-15071,  
 Spain

SOURCE: Heterocycles (1994), 38(6), 1299-305

CODEN: HTCYAM; ISSN: 0385-5414

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 121:133999

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB A synthesis for two new polycyclic heterocyclic ring systems is reported.  
 Cyclization of pyrrolidinocarboxamide derivs. of Et  
 3-(pyrrol-1-yl)thieno[2,3-b]pyridine-2-carboxylate I and Et  
 3,5-di(pyrrol-1-yl)dithieno[3',2'-e:2,3-b]pyridine-2,6-dicarboxylate II  
 afford iminium salts that were transformed into the new title  
 heteropolycyclic compds. III and IV, resp.

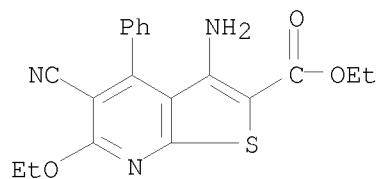
IT 157139-72-5P 157139-73-6P 157139-74-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation and reaction of, in preparation of pyridothienopyrrolizine  
 derivative)

RN 157139-72-5 CAPLUS

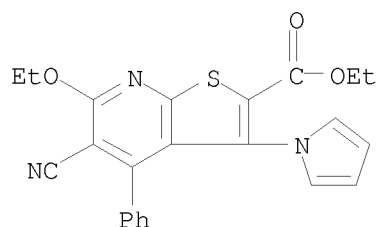
CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
 3-amino-5-cyano-6-ethoxy-4-phenyl-, ethyl ester (CA INDEX NAME)



RN 157139-73-6 CAPLUS

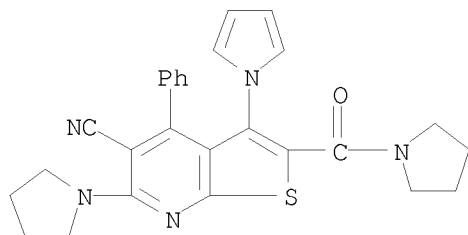
CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
 5-cyano-6-ethoxy-4-phenyl-3-(1H-pyrrol-1-yl)-, ethyl ester (CA INDEX  
 NAME)

10/574,788



RN 157139-74-7 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
4-phenyl-6-(1-pyrrolidinyl)-2-(1-pyrrolidinylcarbonyl)-3-(1H-pyrrol-1-yl)-  
(CA INDEX NAME)



L7 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:169065 CAPLUS

DOCUMENT NUMBER: 118:169065

ORIGINAL REFERENCE NO.: 118:29000h,29001a

TITLE: A convenient synthesis of some new  
pyrido[3',2':4,5]thieno[3,2-d]pyrimidine derivatives  
with potential biological activity

AUTHOR(S): Peinador, Carlos; Ojea, Vicente; Quintela, Jose M.  
CORPORATE SOURCE: Fac. Cienc., Univ. La Coruna, La Coruna, E-15071,  
Spain

SOURCE: Journal of Heterocyclic Chemistry (1992), 29(7),  
1693-702

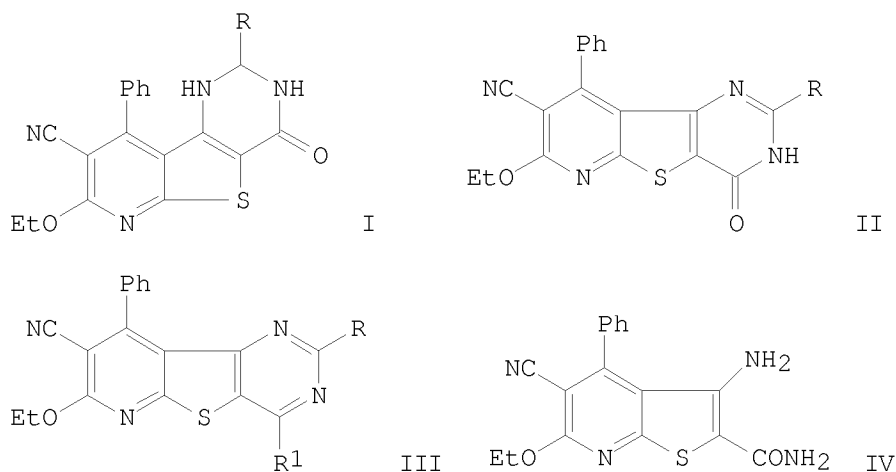
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 118:169065

GI



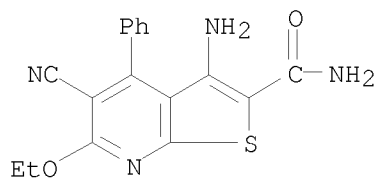
AB Ready, convenient synthesis of pyrido[3',2':4,5]thieno[3,2-d]pyrimidines I, II [R = ClCH<sub>2</sub>, (un)substituted Ph], and III [R = (un)substituted Ph, R1 = Cl] from 2-chloro-3,5-dicyano-6-ethoxy-4-phenylpyridine via aminocarboxamide IV are reported. In addition, the reaction of III (R = 2-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, R1 = NHNH<sub>2</sub>) with reagents such as formic acid and tri-Et orthoformate yielded the fused tetraheterocyclic 8-cyano-9-ethoxy-5-(2'-nitrophenyl)-7-phenylpyrido[3',2':4,5]thieno[2,3-e]-1,2,4-triazolo[4,3-c]pyrimidine.

IT 146630-15-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and cyclocondensation of, with aldehydes, pyridothienopyrimidines from)

RN 146630-15-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3-amino-5-cyano-6-ethoxy-4-phenyl-  
(CA INDEX NAME)



L7 ANSWER 30 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:407883 CAPLUS

DOCUMENT NUMBER: 117:7883

ORIGINAL REFERENCE NO.: 117:1595a,1598a

TITLE: Synthesis of new  
pyrido[3',2':4,5]thieno[3,2-d]pyrimidines and  
pyrazolylpyridines

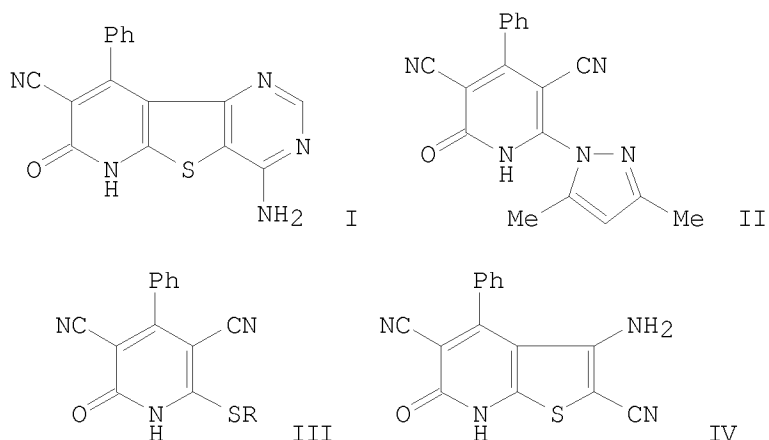
AUTHOR(S): Mahgoub, S. A.; Badr, M. Z. A.; Abd El-Hafez, A. A. A.

CORPORATE SOURCE: Fac. Sci., Assiut Univ., Assiut, Egypt

SOURCE: Bulletin of the Faculty of Science, Assiut University  
(1991), 20(2), 43-53

CODEN: BSAUDW; ISSN: 0366-4740

DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

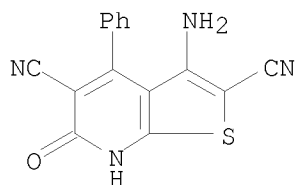


AB A variety of title compds., including, I and II, were prepared from 3,5-dicyano-6-mercapto-4-phenylpyridin-2(1H)one (III, R = H). Thus, III (R = H) was treated with ClCH<sub>2</sub>CN and NaOAc in EtOH to give III (R = CH<sub>2</sub>CN) which cyclized in the presence of NaOEt to give aminodicyanophenylthienopyridinone IV. HCONH<sub>2</sub> cyclocondensed with IV at 170° to give I.

IT 141481-02-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cyclocondensation of, of carbon disulfide or formamide)

RN 141481-02-9 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile,  
 3-amino-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)



L7 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:471531 CAPLUS

DOCUMENT NUMBER: 115:71531

ORIGINAL REFERENCE NO.: 115:12367a,12370a

TITLE: Synthesis and reactions of some new thieno[2,3-b]pyridines and the antimicrobial effects

AUTHOR(S): Badr, M. Z. A.; Mahgoub, S. A.; Abdel-Latif, F. F.; El-Hafez, A. A. A. Abd

CORPORATE SOURCE: Fac. Sci., Assiut Univ., Assiut, Egypt

SOURCE: Phosphorus, Sulfur and Silicon and the Related

Elements (1991), 55(1-4), 175-83

CODEN: PSSLEC; ISSN: 1042-6507

DOCUMENT TYPE:

Journal

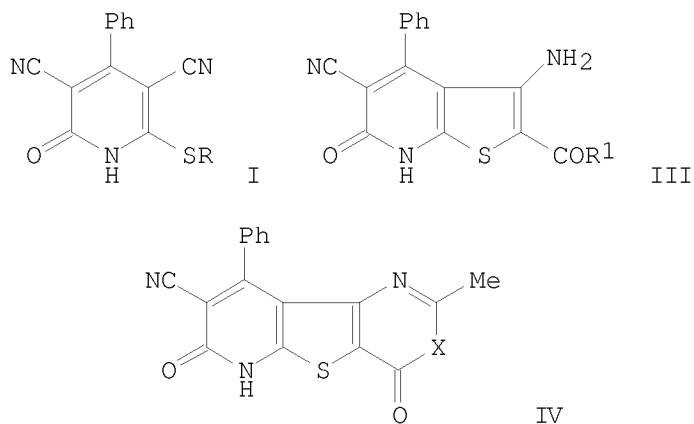
LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 115:71531

GI



AB Mercaptopyridone I (R = H) was converted into a variety of products I (R = CH<sub>2</sub>COR<sub>1</sub>; R<sub>1</sub> = OEt, NHNH<sub>2</sub>, NHNHAc, NHNHCONHPh, NHNHCSNHPh, 3,5-dimethyl-1-pyrazolyl, NHN:CHR<sub>2</sub>, NHR<sub>3</sub>, Me, Ph, C<sub>6</sub>H<sub>4</sub>Br-4, C<sub>6</sub>H<sub>4</sub>Me-4; R<sub>2</sub> = Ph, 4-MeOC<sub>6</sub>H<sub>4</sub>, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>; R<sub>3</sub> = Ph, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 2-pyridyl) (II) by reactions with various electrophiles. II (R<sub>1</sub> = OEt, Me, NHR<sub>3</sub>, Ph, 4-BrC<sub>6</sub>H<sub>4</sub>, 4-MeC<sub>6</sub>H<sub>4</sub>) were cyclized with NaOMe in EtOH to give the title thienopyridines III. III (R<sub>1</sub> = OEt) was converted to fused oxazine and pyrimidine derivs. IV (X = O, NH, NNH<sub>2</sub>, NN:CHC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>-4). Selected II and III were tested for bactericidal and fungicidal activity.

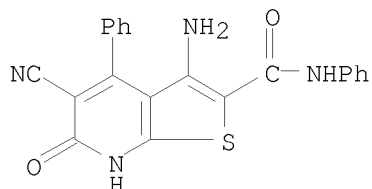
IT 135289-53-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and bactericidal and fungicidal activity of)

RN 135289-53-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3-amino-5-cyano-6,7-dihydro-6-oxo-N,4-diphenyl- (CA INDEX NAME)



IT 135289-57-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

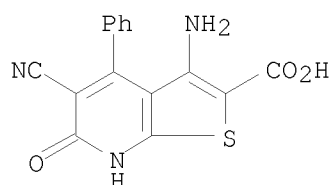
(preparation and cyclocondensation of, with acetic anhydride)

RN 135289-57-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,

10/574,788

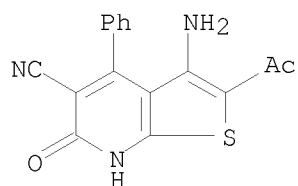
3-amino-5-cyano-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)



IT 135289-54-2P 135289-55-3P 135289-56-4P  
135289-68-8P 135289-69-9P 135289-70-2P  
135320-36-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

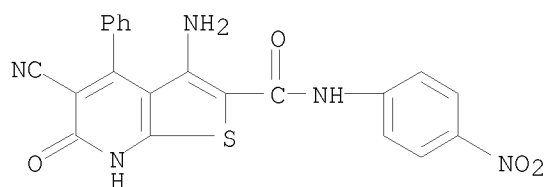
RN 135289-54-2 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
2-acetyl-3-amino-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)



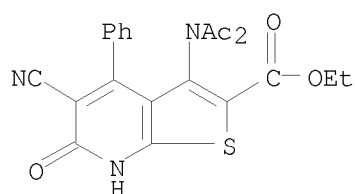
RN 135289-55-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3-amino-5-cyano-6,7-dihydro-N-(4-nitrophenyl)-6-oxo-4-phenyl- (CA INDEX  
NAME)



RN 135289-56-4 CAPLUS

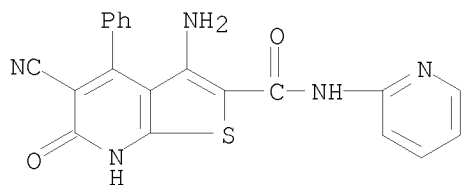
CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
5-cyano-3-(diacetyl-amino)-6,7-dihydro-6-oxo-4-phenyl-, ethyl ester (CA  
INDEX NAME)



10/574,788

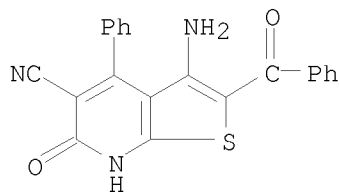
RN 135289-68-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,  
3-amino-5-cyano-6,7-dihydro-6-oxo-4-phenyl-N-2-pyridinyl- (CA INDEX NAME)



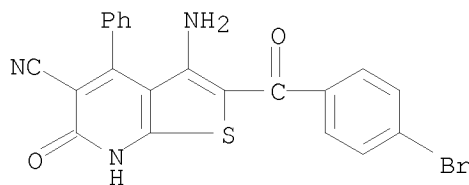
RN 135289-69-9 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3-amino-2-benzoyl-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)



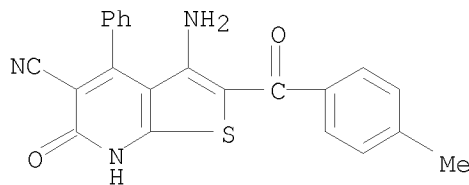
RN 135289-70-2 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3-amino-2-(4-bromobenzoyl)-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)



RN 135320-36-4 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3-amino-6,7-dihydro-2-(4-methylbenzoyl)-6-oxo-4-phenyl- (CA INDEX NAME)

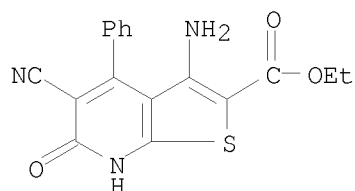


IT 135289-52-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation, reactions, and bactericidal and fungicidal activity of)

RN 135289-52-0 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
3-amino-5-cyano-6,7-dihydro-6-oxo-4-phenyl-, ethyl ester (CA INDEX NAME)

L7 ANSWER 32 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:235207 CAPLUS

DOCUMENT NUMBER: 112:235207

ORIGINAL REFERENCE NO.: 112:39673a,39676a

TITLE: Novel synthesis of pyridin-2(1H)-thiones and  
thieno[2,3-b]pyridines: reaction of ethoxymethylenes  
with activated nitrilesAUTHOR(S): Elgemeie, Galal Eldin Hamza; Ramiz, Mahmoud Mohamed  
Mahfouz

CORPORATE SOURCE: Chem. Dep., Fac. Sci., Bani Suef, Egypt

SOURCE: Phosphorus, Sulfur and Silicon and the Related

Elements (1989), 46(1-2), 95-8

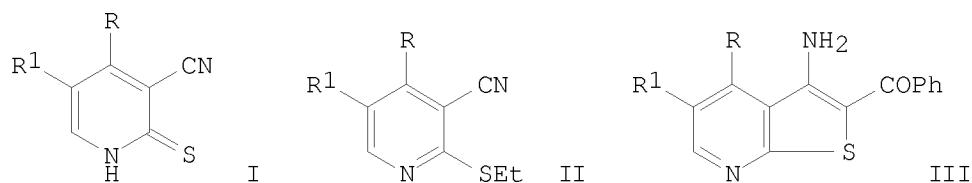
CODEN: PSSLEC; ISSN: 1042-6507

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 112:235207

GI

AB RCOCR1:CHOEt (R = Ph, 4-MeOC6H4, Me; R1 = cyano, Ac, Bz, CO2Et)  
cyclocondensed with NCCH2CSNH2 to give 35-55% cyanopyridinethiones I.  
Alkylation of I with EtI-K2CO3 in DMF gave ethylthiopyridines II, whereas,  
treating I with PhCOCH2Br and K2CO3 in DMF gave 75-90% thienopyridines  
III.

IT 127236-35-5P 127236-42-4P

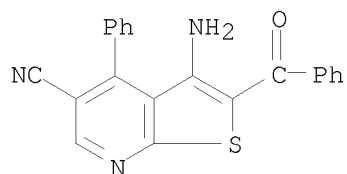
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 127236-35-5 CAPLUS

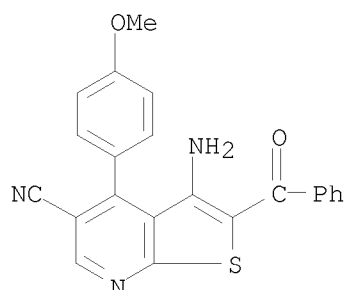
CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-2-benzoyl-4-phenyl- (CA  
INDEX NAME)



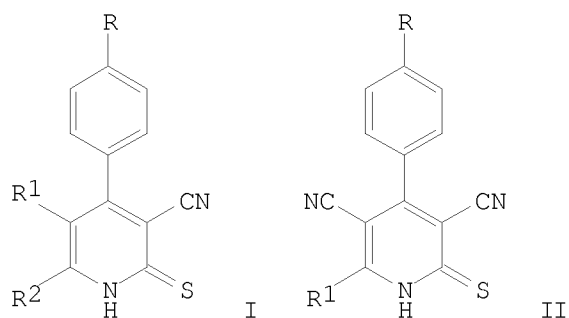
10/574,788



RN 127236-42-4 CAPLUS  
CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3-amino-2-benzoyl-4-(4-methoxyphenyl)- (CA INDEX NAME)



L7 ANSWER 33 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1987:4825 CAPLUS  
DOCUMENT NUMBER: 106:4825  
ORIGINAL REFERENCE NO.: 106:907a,910a  
TITLE: Condensed pyridines. 4. Michael reaction in the  
synthesis of substituted 3-cyanopyridine-2(1H)-thiones  
AUTHOR(S): Sharanin, Yu. A.; Shestopalov, A. M.; Mortikov, V.  
Yu.; Melenchuk, S. N.; Promonenkov, V. K.; Zolotarev,  
B. M.; Litvinov, V. P.  
CORPORATE SOURCE: Inst. Org. Khim., Moscow, USSR  
SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya  
(1986), (1), 153-9  
CODEN: IASKA6; ISSN: 0002-3353  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
OTHER SOURCE(S): CASREACT 106:4825  
GI



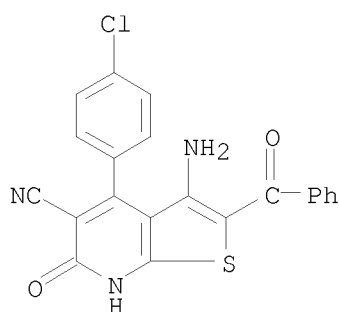
10/574,788

AB Condensation of 4-RC<sub>6</sub>H<sub>4</sub>CH:C(CN)<sub>2</sub> with NCCH<sub>2</sub>CSNH<sub>2</sub> or 4-RC<sub>6</sub>H<sub>4</sub>CH:C(CN)CSNH<sub>2</sub> with CH<sub>2</sub>(CN)<sub>2</sub> in the presence of Et<sub>3</sub>N or piperidine gave (NC)<sub>2</sub>C:C(C<sub>6</sub>H<sub>4</sub>R-4)CH(CN)CSNH<sub>2</sub> (R = H, Cl, F, Br) (all 4 prepared both ways). These condensed with ketones to give pyridinethiones I [R, R<sub>1</sub>, R<sub>2</sub> = H, H, Me; H, Me, Me; H, H, 4-FC<sub>6</sub>H<sub>4</sub>; F, Me, Me; Cl, Ac, Me; Br (R<sub>1</sub>R<sub>2</sub> =) (CH<sub>2</sub>)<sub>4</sub>]. Similarly prepared were pyridinethiones II (R, R<sub>1</sub> = Cl, OH; Br, OH; Br, NH<sub>2</sub>).

IT 105648-25-7P 105648-26-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

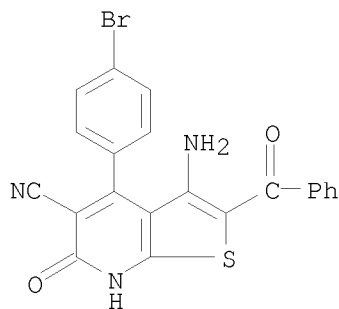
RN 105648-25-7 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3-amino-2-benzoyl-4-(4-chlorophenyl)-6,7-dihydro-6-oxo- (CA INDEX NAME)



RN 105648-26-8 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,  
3-amino-2-benzoyl-4-(4-bromophenyl)-6,7-dihydro-6-oxo- (CA INDEX NAME)



L7 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1985:437345 CAPLUS

DOCUMENT NUMBER: 103:37345

ORIGINAL REFERENCE NO.: 103:6055a,6058a

TITLE: Reactivity of heterocyclic compounds. V. Behavior of 6-alkoxy-2-amino-(or chloro)-4-aryl-3,5-dicyanopyridines in the presence of nucleophiles

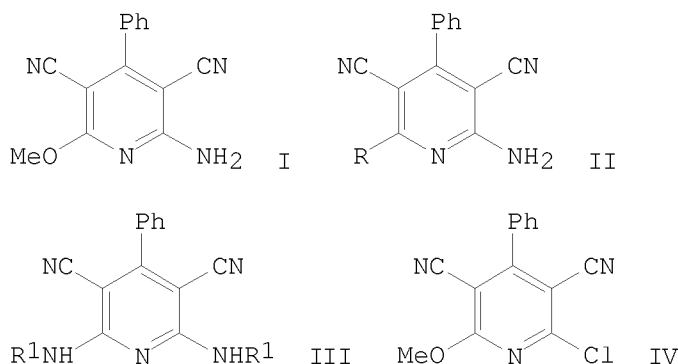
AUTHOR(S): Quintela, Jose Maria; Soto, Jose L.

CORPORATE SOURCE: Fac. Cienc. Quim., Univ. Complutense, Madrid, 28040, Spain

SOURCE: Anales de Quimica, Serie C: Quimica Organica y Bioquimica (1984), 80(3), 268-72

DOCUMENT TYPE: Journal  
 LANGUAGE: Spanish  
 GI

CODEN: AQSBD6; ISSN: 0211-1357



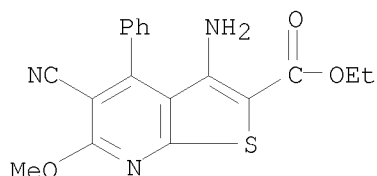
AB Methoxypyridine derivative I was treated with amines and Na alkoxides to yield II (R = substituted amino, alkoxy); diamines III (R1 = CH<sub>2</sub>CH<sub>2</sub>OH, Bu, PhCH<sub>2</sub>) were prepared from chloromethoxypyridine IV. I was stirred with HOCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> 24 h to give II (R = NHCH<sub>2</sub>CH<sub>2</sub>OH).

IT 97124-98-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 97124-98-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,  
 3-amino-5-cyano-6-methoxy-4-phenyl-, ethyl ester (CA INDEX NAME)



L7 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1984:174629 CAPLUS

DOCUMENT NUMBER: 100:174629

ORIGINAL REFERENCE NO.: 100:26557a,26560a

TITLE: Synthesis of heterocyclic compounds. XXXVII.  
 Preparation of

4,6-diaryl-1,2-dihydro-2-thioxo-3,5-  
 pyridinedicarbonitriles and related compounds

AUTHOR(S): Rubio Encinas, Maria Jesus; Seoane, Carlos; Soto, Jose  
 L.

CORPORATE SOURCE: Fac. Cienc. Quim., Univ. Complutense, Madrid, Spain

SOURCE: Liebigs Annalen der Chemie (1984), (2), 213-22

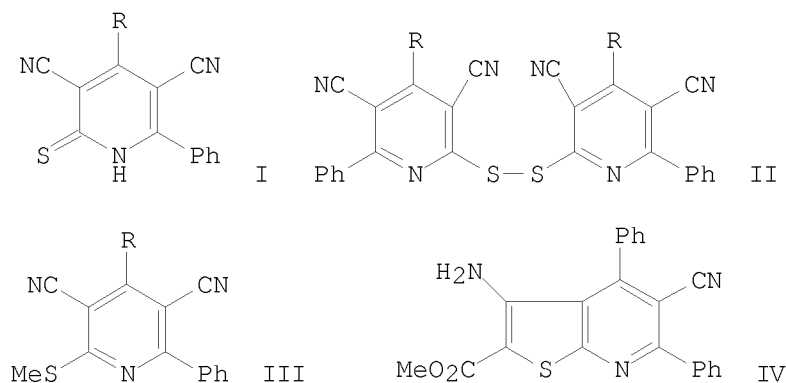
CODEN: LACHDL; ISSN: 0170-2041

DOCUMENT TYPE: Journal

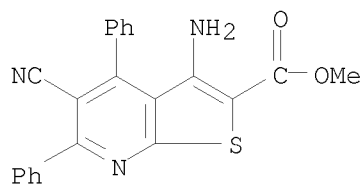
LANGUAGE: English

OTHER SOURCE(S): CASREACT 100:174629

GI



- AB The reaction of  $\text{NCCH}_2\text{CSNH}_2$  with  $\alpha$ -benzoylcinnamionitriles  
 4- $\text{RC}_6\text{H}_4\text{CH}:\text{C}(\text{CN})\text{COPh}$  ( $\text{R} = \text{H, Me, MeO, Cl, NO}_2$ ) in basic EtOH solution gave  
 pyridinedicarbonitriles I and disulfides II. II reacted with  $\text{HSCH}_2\text{CH}_2\text{OH}$   
 to give I, which were reconverted to II by reaction with iodine-KI or  
 $\text{Me}_2\text{SO}-\text{F}_3\text{CCO}_2\text{H}$ . Methylation of I or II gave (methylthio)pyridines III. I  
 ( $\text{R} = \text{Ph}$ ) cyclocondensed with  $\text{ClCH}_2\text{CO}_2\text{Et}$  to give thieno[2,3-b]pyridine IV.
- IT 89736-80-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)
- RN 89736-80-1 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3-amino-5-cyano-4,6-diphenyl-,  
 methyl ester (CA INDEX NAME)



=&gt;